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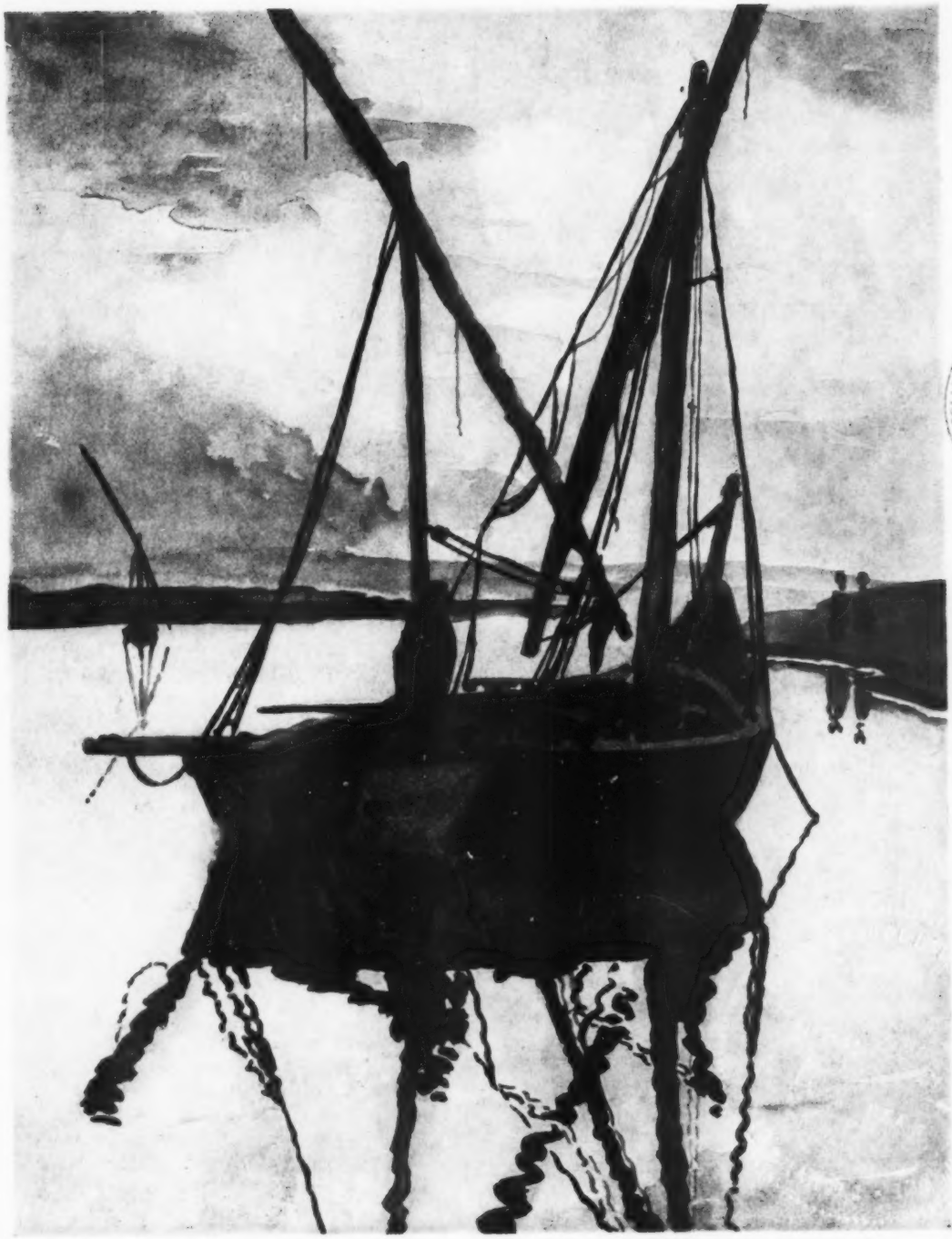

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AMERICAN ARCHITECT

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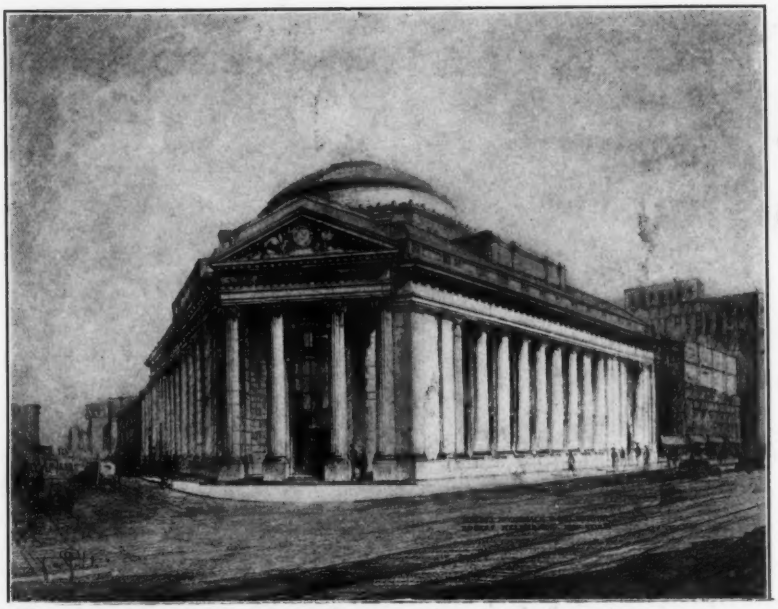
July 1932

● TAKE HEART, GENTLEMEN:



The new home of the Dime Savings Bank, Brooklyn, N. Y. Architects: Halsey, McCormack & Helmer, Inc. Contractors. Wm. Kennedy Construction Company. Architectural Metal Work, including Bronze Windows, Doors Counter Screens, Check Tables and Bulletin Boards, executed and installed by the Wm. H. Jackson Company.

Savings Banks don't Gamble!

SAVINGS BANKS don't gamble with depositors money—or with their own, either!

The fact that the Dime Savings Bank of Brooklyn is, *at this time*, erecting a fine, new building for the accommodation of future generations of depositors is an omen of returning prosperity.

Only a straw, perhaps, but remember, Mr. Banker is a level-headed gentleman who knows full well that men and women must earn *more* than *the necessities of life* to "do business" with *him.*

It's significant, too, that this new building should replace one built on the same site less than 25 years ago—a splendid marble and bronze structure, *then* considered the last word in bank buildings.

Progress marches on! The *standards* of 1907 are not the *specifications* of 1932! The last quarter century has seen many important changes in planning and building. Outstanding among them are radical improvements in the design, construction and installation of Architectural Metal Work.

That's why the Wm. H. Jackson Company is proud of having been commissioned to execute the Bronze Windows, Doors, Counter Screens, Check Tables, Bulletin Boards and other Ornamental Metal Work for this—America's newest and most up-to-date Bank building.

Other important projects, in which Architectural Metal or Tile Work by the Wm. H. Jackson Company is now being installed, are listed at the left.

Other Buildings Now Under Construction for which Wm. H. Jackson Company's Architectural Metal or Tile Work Has Been Specified:

ROCKEFELLER CENTER—Theatre No. 8
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Corbett, Harrison & MacMurray
Hood & Fouilhoux
Contractor—Barr, Irons & Lane

ROCKEFELLER CENTER—Theatre No.10
New York
Architects—Reinhard & Hofmeister
Corbett, Harrison & MacMurray
Hood & Fouilhoux
Contractor—John Lowry, Inc.

PENN MUTUAL LIFE INSURANCE CO.
Philadelphia
Architect—Ernest J. Mathewson
Contractor—Doyle & Company

CHRISTIAN SCIENCE PUBLISHING SOCIETY BUILDING—Boston
Architect—Chester Lindsay Churchill
Contractor—Aberthaw Company

BRONX COUNTY BUILDING
Architects—Max Hausle & J. H. Friedlander
Contractor—Wm. Kennedy Const. Company

U. S. BOTANIC GARDENS—Washington
Architects—Bennet, Parsons & Frost
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●

Wm. H. Jackson Company (Est. 1827) produces all types of ARCHITECTURAL METAL WORK—cast, hand-wrought or machine processed—in Bronze, Brass, Nickel, Wrought Iron, Aluminum and the newer Non-Corrosive Alloys. These products include Casement and Double-Hung Windows in both Bronze and Aluminum, and Ornamental Metal Work of every description. This Company also maintains a SPECIAL TILING DEPARTMENT which installs Outdoor and Indoor Swimming Pools and all types of Exterior and Interior Tile Work. The Wm. H. Jackson Company Consulting and Collaborating Services—developed through wide experience in working on major products—are at your disposal without obligation.

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IT IS TRUE that General Electric will present during July a revolutionary new type of oil heating, startlingly different and modern in principle.

The result of five years' engineering research and one year's actual service in many homes, this new type of heating will offer entirely automatic operation . . . quick heat, accurately controlled...higher efficiency and lower operating cost . . . quiet operation . . . no soot, fumes, or odor . . . economical hot water supply the year round . . . handsome, compact design . . . and the overall guarantee of one responsible manufacturer — General Electric.

Advance information and data in bulletin form can be obtained by addressing Air Conditioning Dept., General Electric Company, 120 Broadway, New York, N.Y. Ask for Bulletin OF-101.

GENERAL ELECTRIC

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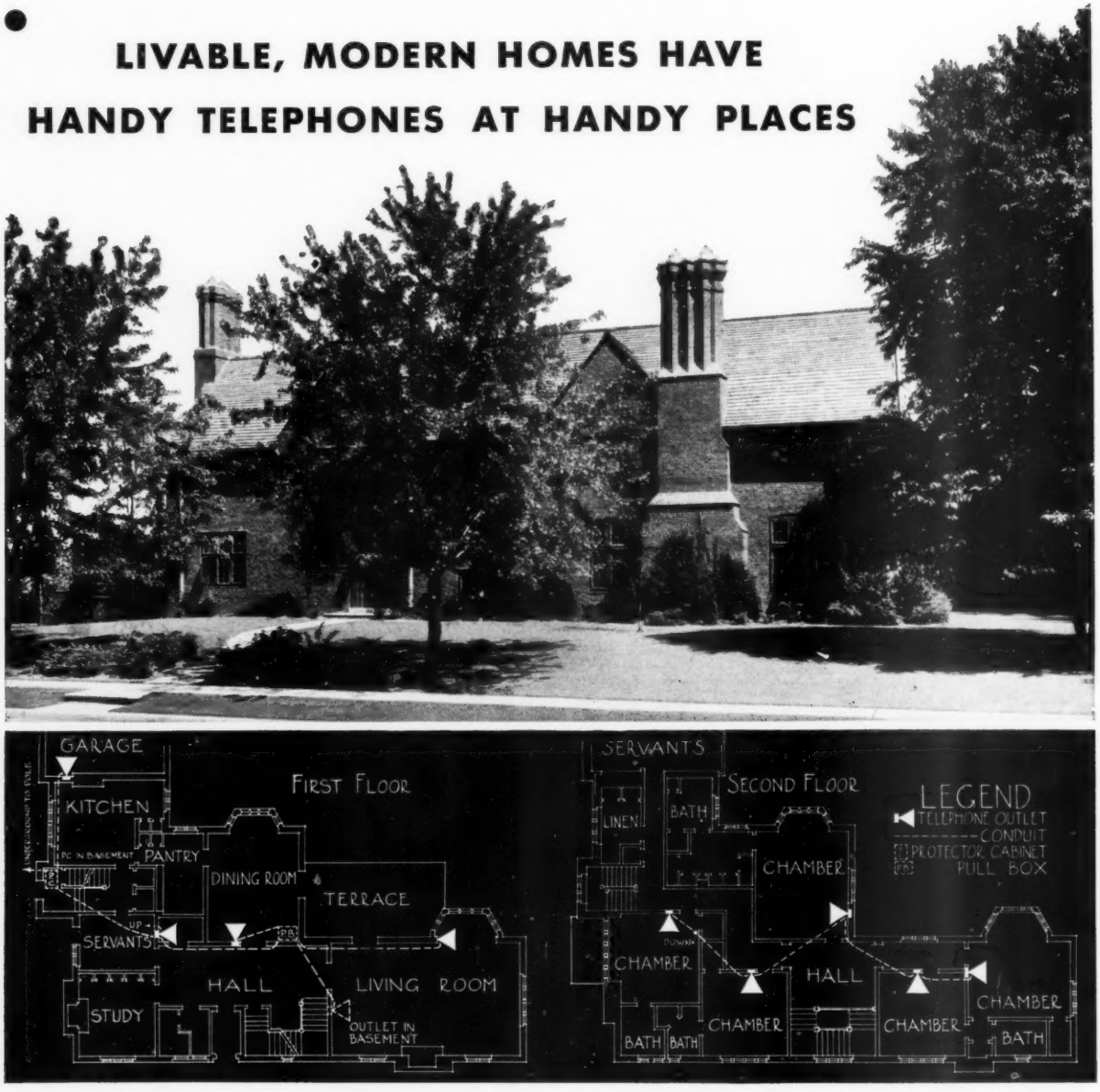
LIVABLE, MODERN HOMES HAVE HANDY TELEPHONES AT HANDY PLACES



In the residence of Mr. T. H. Hinchman, 92 Vendome Road, Village of Grosse Pointe Farms, Detroit, Michigan, telephone convenience is provided for by built-in conduit connecting ten telephone outlets, including one in the basement game room. SMITH, HINCHMAN & GRYLLS, Architects, *Detroit.*

COMFORT and efficiency are two prime requisites of up-to-date homes. Telephone convenience contributes generously to both. Telephones at strategic points in important rooms save steps and minutes, simplify household management.

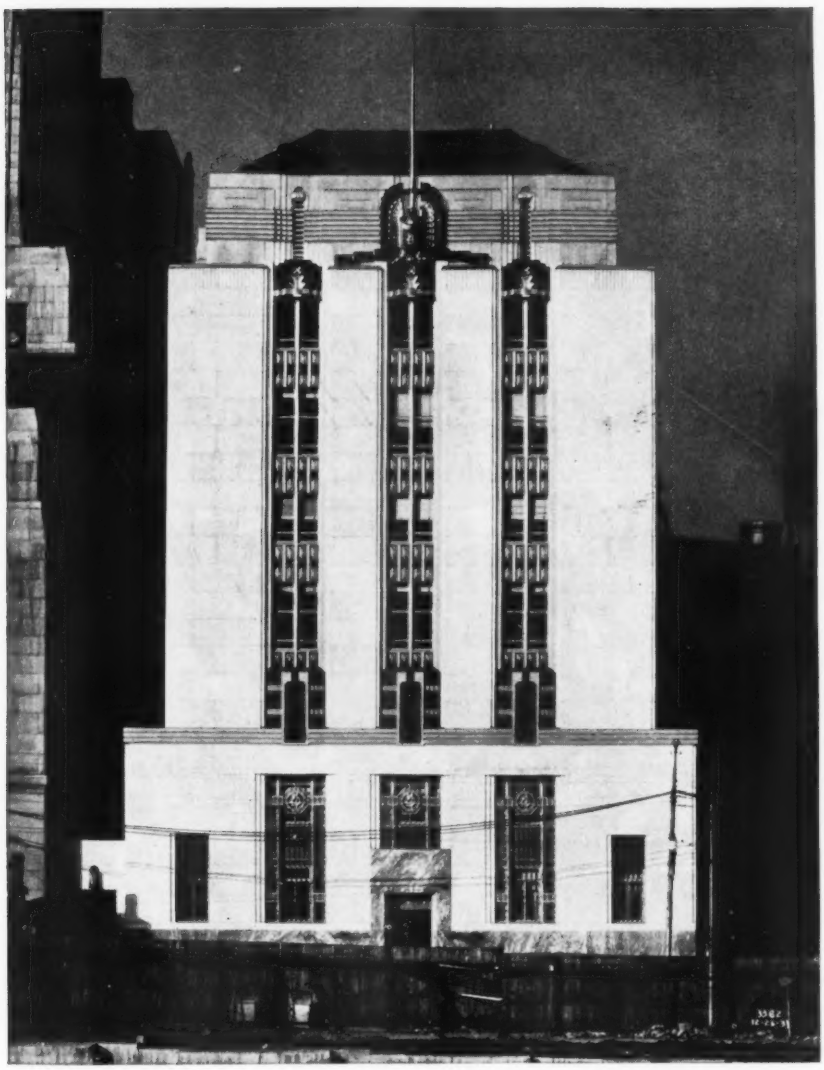
Architects who want to assure adequate telephone arrangements, plan carefully in advance, specify conduit for telephone wires in walls and floors. Then outlets can be located exactly where they're wanted, to meet individual needs. All wiring is concealed and there is greater freedom from service interruptions.

Trained representatives of the local telephone company will gladly help you choose the type of telephone equipment and installation best adapted to your projects. There is no charge. Call the Business Office and ask for "Architects' and Builders' Service."

American Architect, published monthly by International Publications, Inc., 57th Street at 8th Avenue, New York, N. Y.; Yearly subscription $3.00. Entered as second class matter, April 5th, 1926, at the Post Office, at New York, N. Y., under the act of March 3rd, 1879. Issue number 2609, dated July, 1932.

Whether in the traditional classic or the designs of today, the beauty of a monumental building is enhanced by the use of GEORGIA MARBLE

Federal Reserve Branch Bank, Pittsburgh, Penna.; Walker and Weeks, *Architects;* Mellon Stuart, *General Contractor.*



MARBLE, through which the architecture and sculpture of the ages have been given to the world, becomes the medium for the expression of the new design of today.

The New York Trust Company Building, 57th Street and 5th Avenue, the Folger Library in Washington, and the Pittsburgh Federal Reserve Branch Bank are just a few of the recently erected modern buildings to be built of Georgia Marble.

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THE AMERICAN BLOWER CORPORATION is not in the contracting business; neither does it offer architectural or professional engineering service. We are fundamentally a manufacturing organization. Our policy for the sale of air conditioning equipment remains as heretofore; namely, distribution through the established channels of the contracting trade, collaborating with the architect and consulting engineer in its design and application. The activities of our sales, advertising, engineering, research and manufacturing departments will be directed toward that end.

O. M. Rose
Vice President

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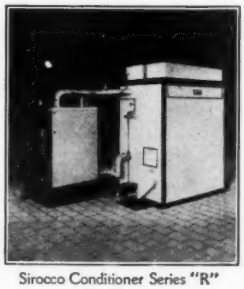
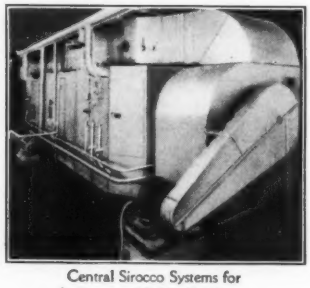


Sirocco Conditioner Series "R" for Homes



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A plate from Durer's "Elementa Geometrica," 1532.
From "The History of Taste"

THE HISTORY OF TASTE

By Frank P. Chambers. Published by Columbia University Press, New York. Illustrated; indexed; 342 pages; size 6½ x 9½; price, $4.25

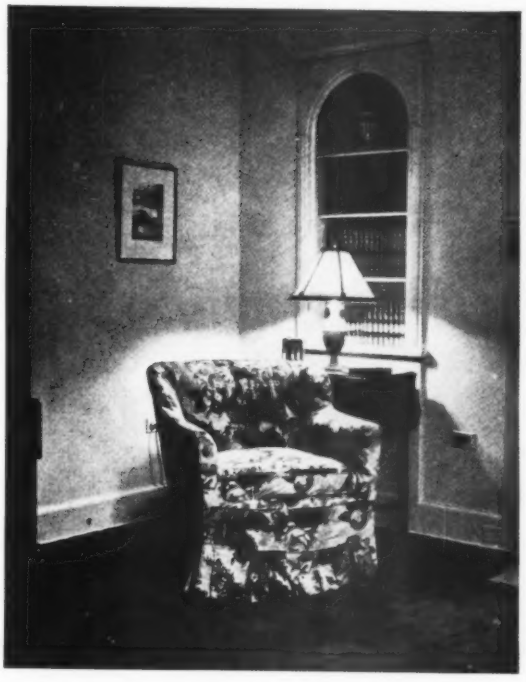
THIS book contains the substance of a course of lectures on the history of taste in Europe in the arts of painting, sculpture and architecture. It is arranged to show the origin and opposition of "classicism" and "romanticism" in art. The author states, "My purpose is to describe the major revolutions of taste and criticism in the history of European art. I begin with a chapter on taste in the Middle Ages. I consult mediaeval writers themselves for their views and opinions on the architecture, sculpture and painting executed in their own time. Chapters then follow on the Renaissance in Italy, France, England, on the rise and fall of the Academies, on the Romantic Movement and on the Revivals of the last century. In every case I have tried to rid my mind of modern standards of taste and allowed the critics of the past to speak for themselves. Finally a short Appendix follows in which I apply the same treatment to classical antiquity."

HOME FINANCE AND TAXATION

Edited by John M. Gries and James Ford. Published by the President's Conference on Home Building and Home Ownership. New Commerce Building, Washington, D. C. Indexed; 278 pages, size 6 x 9; price $1.15

WAYS in which to correct the defects in home financing and to lighten the burden of taxes on real estate are given in this book, which contains the results of many months of study by the members of two committees appointed by President Hoover and the Secretary of Commerce. The methods of making appraisals, legislation and other factors that influence home ownership are discussed.

The book covers financing home ownership with a summary of data from various types of lending agencies, text of President Hoover's statement on the proposed establishment of home loan discount banks, taxation and housing, the shifting and incidence of real estate taxes, and similar data.



The truly hospitable reading chair has, besides a small table for needed accessories, its own lamp. From "Artificial Light and Its Application in the Home"

ARTIFICIAL LIGHT AND ITS APPLICATION IN THE HOME

Prepared by the Committee on Residence Lighting, Illuminating Engineering Society. Published by the McGraw-Hill Book Company, New York. Illustrated; indexed; 145 pages; size 6 x 9¼; price $1.50

THE aim of this book is to present a practical, concise and reliable treatment of artificial lighting and its application in the home. It has been prepared by specialists who have devoted either all or a large part of their time and efforts to the development of the art of home lighting and the compilation accordingly includes the underlying fundamentals and practices gained from their researches, observations and experiences.

The book covers the fundamentals of lighting, characteristics of incandescent lamps, light and color, wiring for the home, lighting equipment, how to light various rooms, etc. There is a chart in color giving the reflection factors of colored surfaces.

The book is well written and gives the fundamentals of residential lighting in an interesting way.

XUM

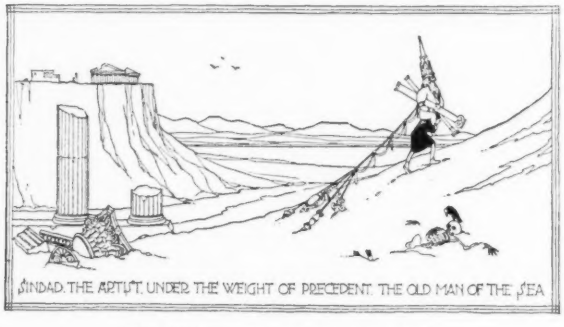
Garden outlook for house groups at Radburn, N. J.
From "Slums, Large-Scale Housing and Decentralization"

SLUMS, LARGE-SCALE HOUSING AND DECENTRALIZATION

Edited by John M. Gries and James Ford. Published by the President's Conference on Home Building and Home Ownership, Commerce Building, Washington, D. C. Illustrated; indexed; 245 pages; size 6 x 9; price $1.15

THIS book is another of the publications growing out of the President's Conference on Home Building and Home Ownership, held last fall. It contains the reports of the committees on blighted areas and slums, large-scale operations, business and housing, and industrial decentralization and housing.

The book is well edited and gives a clear idea of our slum conditions, what they are costing their communities, and what must be done to rid cities of this incubus.



Sketch from "The Frozen Fountain"

THE FROZEN FOUNTAIN

By Claude Bragden, F.A.I.A. Published by Alfred A. Knopf, New York. Illustrated; 125 pages; size 7½ x 10½; price $3.75

ESSAYS on architecture and the art of design in space, written by the designer of many important buildings and also of the scenery, costumes and lighting of all of Walter Hampden's productions including *Cyrano de Bergerac*.

Mr. Bragden in his introduction says that, "This book is addressed to everyone interested in the fine arts, to designers in all fields, and particularly to architects, architectural students and draughtsmen. It constitutes the final distillation of many years of thought and experimentation along unusual lines."

The book is interesting in its philosophy. Its illustrations, too, are interesting. Many of them are of the whimsical nature of that reproduced in connection with this review; others are more serious and give abstract designs, analyses of compositions, various types of ornament, etc.

The titles of the essays are "Foundation Stones," "The Frozen Fountain," "Retrospect," "The Skyscraper," "Regulating Lines," "Isometric Perspective," "Ornament," and "Color."

A roof at Broadway, England. From "Planning for Sunshine and Fresh Air"

PLANNING FOR SUNSHINE AND FRESH AIR

By Alfred Hopkins, architect. Published by the Architectural Book Publishing Company, New York. Illustrated; 236 pages; size 6½ x 9½; price $5.

IN his foreword, Mr. Hopkins describes this book as "being sundry discourses and excursions in the pleasant art of building homes, set forth in a manner and upon a theory quite new and quite different from those usually employed: containing many valuable and original hints upon the essentials of design; of construction; of furnishing, and of planting; and how best to effect their proper economies. Illustrated with many plans and photographs never before shown or published; and written for those who are interested in creating their own homes, entire or in part."

The book is written in an interesting style and illustrated by photographs and plans which serve to visualize the points made in the text. It covers site and exposures, planning for sunshine and fresh air, types, the Cotswold type and a practical example, the inspiration of precedent, the Spanish phase, the Colonial manner, materials, roofs and roof lines, variety in rooms with a hint at their purpose, furnishing and planting. Many of the author's personal experiences with clients are given, and the book succeeds in giving an excellent picture of Mr. Hopkins' theories of plan and design.

A NEW TEMPLE OF HEALING INVITES THE SUN

LOS ANGELES COUNTY GENERAL HOSPITAL

Architect: Allied Architects, *Cons. Engr.:* E. L. Ellingwood, *Gen. Con.:* Weymouth C. Crowell, *Plumb. and Heat. Con.:* Howe Brothers. All of Los Angeles, California

ON a hill remote from the din and stress of the city, bathed by the sun and soft airs of a favored region, admirable for design, great in size and facilities, complete in every modern resource, the Los Angeles County General Hospital takes high rank among the marvelous institutions of its kind built in this country in recent years. Their like never was before in the world. For never had science and the arts reached a development to make them possible.

Only the best in design, construction and equipment could be thought fit to go into such a building for any use.

It is a matter of pride for the manufacturers of NATIONAL Pipe that in the Los Angeles County General Hospital, as in other noteworthy hospitals lately completed, the major tonnage of pipe was NATIONAL—

America's Standard Wrought Pipe

NATIONAL TUBE COMPANY, PITTSBURGH, PA.

Subsidiary of United States Steel Corporation

NATIONAL PIPE

Photo courtesy *The Architectural Forum*

MODERN ARCHITECTURE certainly needs no defense when so convincingly interpreted as in the Racine County Court House at Racine, Wisconsin. Credit for this strikingly beautiful conception is due Holabird & Root, the Architects. Wisconsin Bridge & Iron Company were the Fabricators and the B-W Construction Company, General Contractors.

Here again, C B Sections were selected for the structural framework. Architects and engineers find in these modern sections complete adequacy to their requirements.

CARNEGIE STEEL COMPANY · PITTSBURGH

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CB SECTIONS

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This month's cover is a water color by E. Sewell Smith. It depicts a lateen-rigged sailboat at anchor on the Nile. Mr. Smith made the painting last year while on a trip through a number of foreign countries including, in addition to North Africa, Greece, Italy, Belgium and the British Isles. He is a graduate of Cornell University and his water colors have been exhibited in Niagara Falls, Buffalo, Ithaca and New York.

AMERICAN ARCHITECT

(Trade-mark registered, U. S. Patent Office)

FOUNDED 1876 • VOLUME CXLII • NUMBER 2609

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JULY 1932

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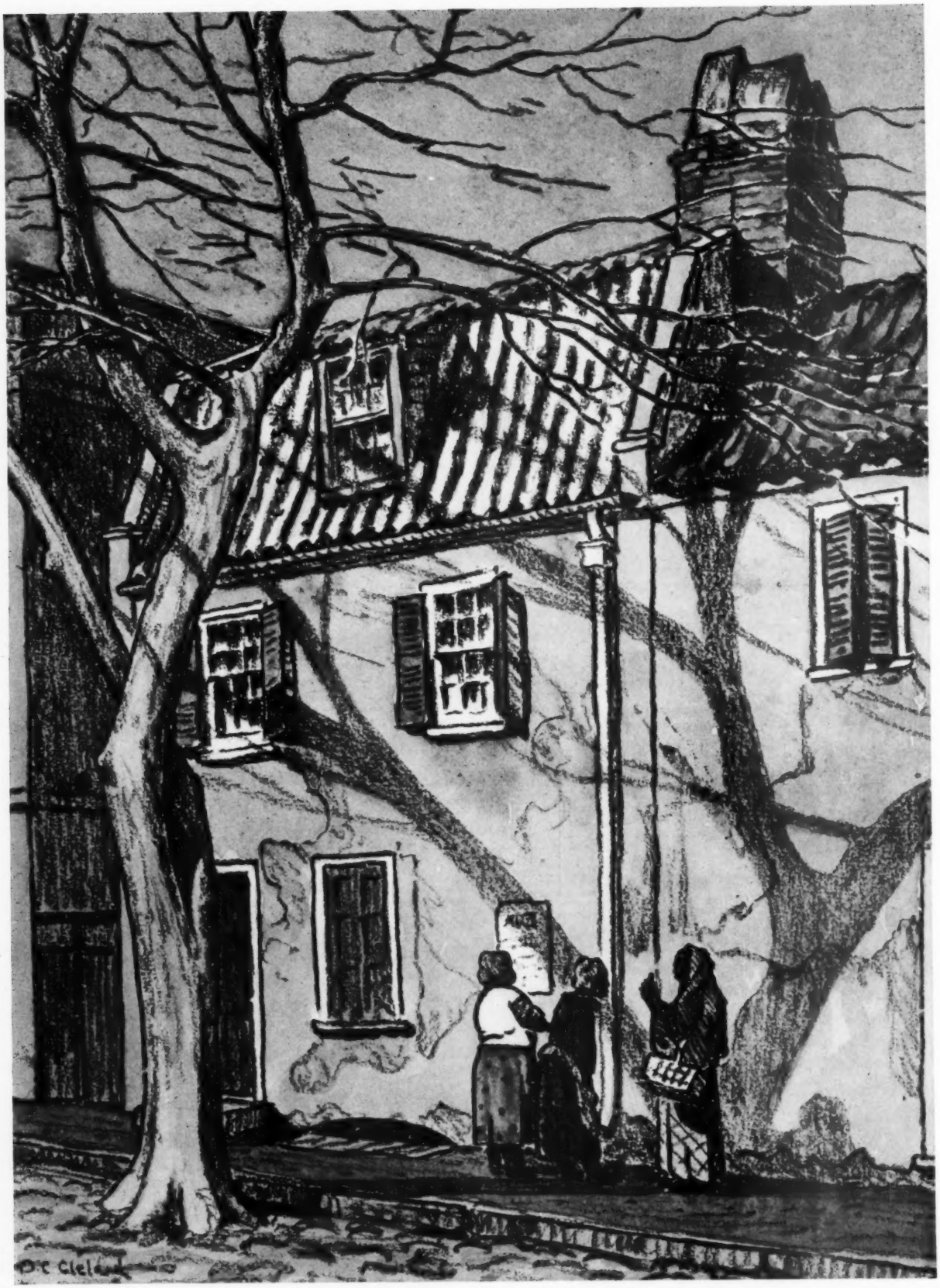
AMERICAN ARCHITECT, Published monthly by International Publications, Inc., 57th Street at Eighth Avenue, New York. William Randolph Hearst, President; Richard E. Berlin, Vice President; John Randolph Hearst, Vice President; Arthur S. Moore, Secretary; Austin W. Clark, Treasurer. Copyright, 1932, by International Publications, Inc. Single copies, 50 cents. Subscription: United States and Possessions, $3.00 per year; $5.00 for two years; $6.00 for three years; Canada, $1.00 extra; foreign countries, $2.00 extra. Entered as second-class matter, April 5, 1926, at the Post Office at New York, N. Y., under the act of March 3, 1879. American Architect is protected by copyright and nothing that appears in it may be reproduced either wholly or in part without permission



OLD TAVERN • CHARLESTON • BY D. C. CLELAND

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MANHATTAN KANSAS

An Exhibition That Would Mean More Business For Architects

BY BENJAMIN F. BETTS, A.I.A.

MANY architectural exhibitions are held each year. These are based almost exclusively upon new buildings of various kinds. At the present time, an unusual opportunity exists for a new kind of architectural exhibition of wide appeal. This exhibition would be confined to reconditioned buildings of all types.

A modernization exhibition should not be difficult to organize in communities large and small and could be as modest or elaborate as conditions warranted. It would have widespread public appeal right *now*. Building material manufacturers and dealers, contractors and civic organizations would doubtless give such exhibitions their cooperation and support.

It should not be difficult to obtain many examples of buildings that have been profitably reconditioned. It should not be difficult to assemble figures as to the cost of improvements and the increased value and revenue derived by owners of these buildings. Well presented, these figures should be a convincing argument for a larger volume of modernizing work. Examples of reconditioning possibilities inherent in most obsolete buildings would stimulate the imagination of owners. It would afford an opportunity to study and bring to the public's attention needed public improvements that would benefit every community.

PROPERLY organized, located and displayed, an exhibition of this nature would stimulate building activity. By stimulating building it would help relieve unemployment and put money into circulation. Organized and directed by architects, it would bring the profession into closer contact with the public. Well publicized, it should mean more business for architects.

For the next few years the reconditioning of existing buildings will be the building industry's major activity. Architects and engineers have a definite place in modernization work. Their function in this field of operation must be made clear to the building public. Modernization exhibitions would help to do that. Details of a plan will be found on the next two pages.

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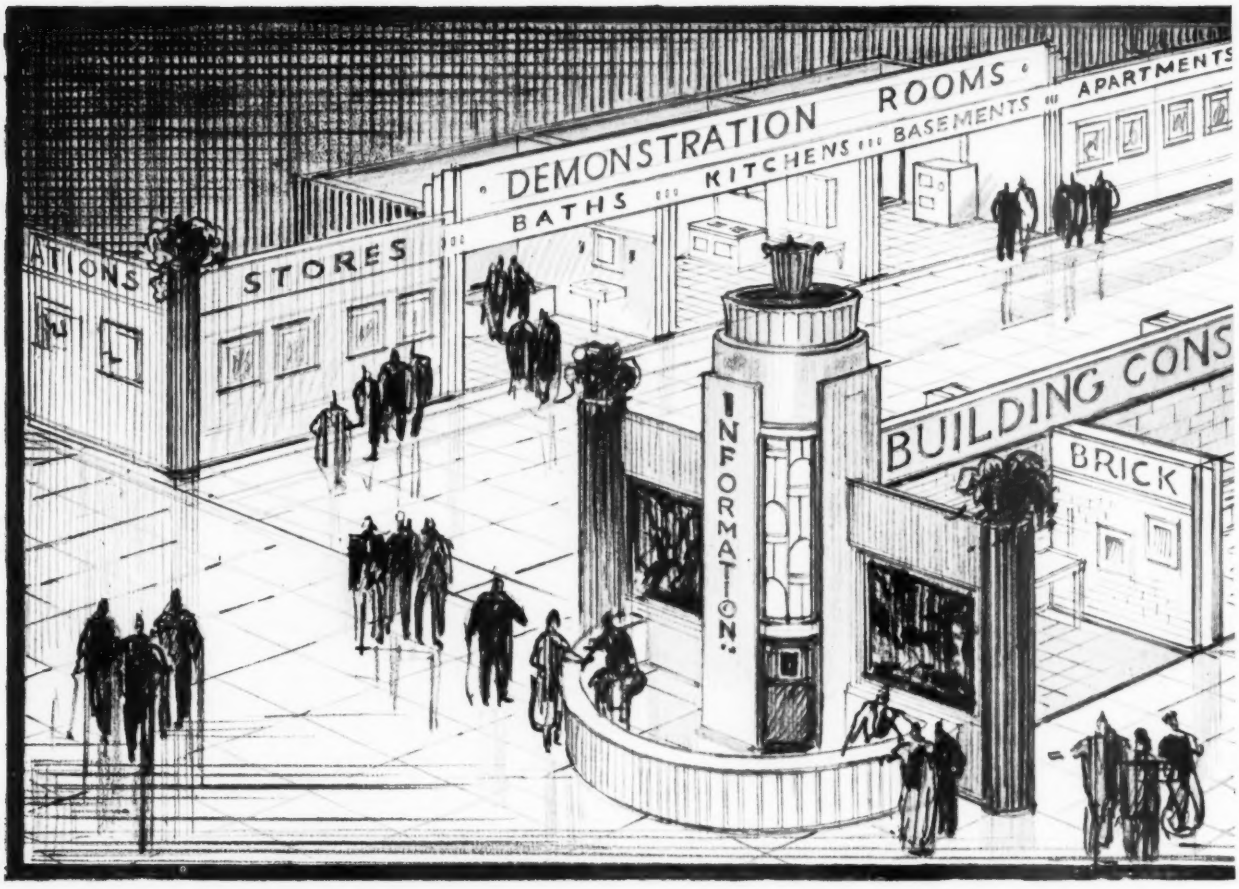


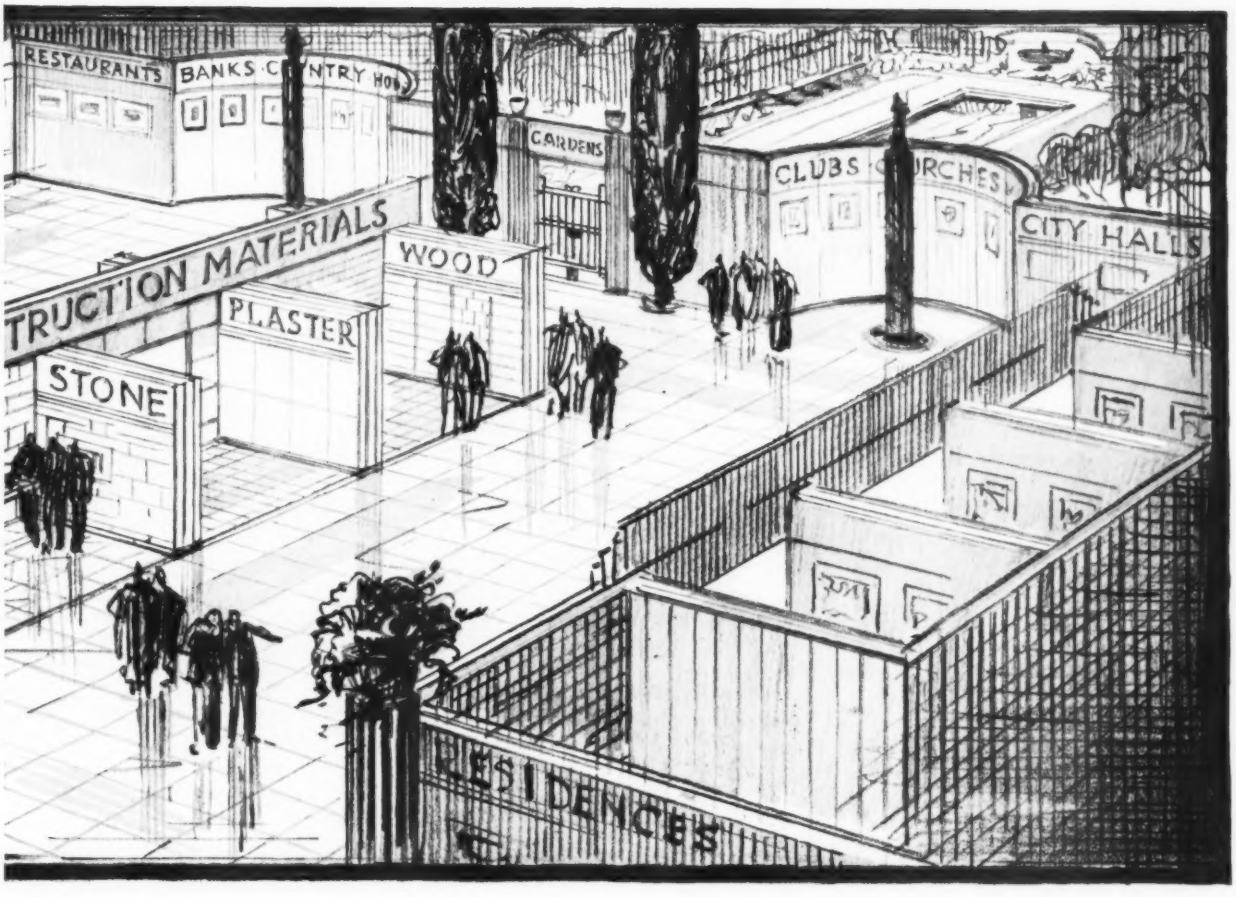
Modernization Shows Would

WHEN it became apparent that the volume of new building construction was greatly reduced and that economic factors would probably prolong that situation, the building industry promptly turned to the neglected field of modernization of obsolete buildings. The modernization movement has been well supported by the industry, backed by magazines reaching both the lay public and technical groups, and publicized by the newspapers. Now is an opportune time for architects to actively contribute to the furthering of the modernization movement by organizing local exhibitions that would forcefully bring the idea before and stimulate the imagination of the public.

Properly organized, promoted and displayed, a modernization or reconditioned-building exhibition would attract widespread attention. It would interest the layman and would doubtlessly be enthusiastically endorsed by civic organizations. As a tangible business enterprise, it would probably be adequately supported by building material producers and dealers, contractors and builders.

For architects it would open a new avenue of civic activity, emphasize professional leadership, assist in the stabilization of the building industry and relief of unemployment and afford the development of what to many would be a new outlet for professional service. Alteration work has always been recognized as a service commanding a larger fee than does new work and clients have paid the fee asked. Volume of work and an organization equipped to handle reconditioning work is all that is needed to make this field profitable. But first, modernization and the architect's importance in this work must be established. A good way to accomplish this is through the medium of a good architectural modernization exhibition.

The fundamental principles of an exhibition of this kind should be the demonstration of what can be done to make obsolete buildings usable and again profitable; how buildings of poor architectural character can be altered to improve their appearance and that of their locality; kinds of building improvements that can be accomplished for specific amounts of money; and the value and importance of the architect's impartial, unbiased guidance in modernization to accomplish the most good for the least financial expenditure. The exhibition should be planned with these principles in mind. Its presentation should attract public attention and be so simply and convincingly displayed that the layman will readily grasp the facts. It should be held in a location that is easily reached by the public and in a place where the public



Stimulate Business

BY BENJAMIN F. BETTS, A.I.A.

naturally goes daily in greatest numbers. It should be so promoted and publicized that it will attract all classes of building owners.

To organizè a reconditioning exhibition, a well qualified director should be selected by a local chapter of the American Institute of Architects, architectural society, or other group of architects. The director should be selected on the basis of executive and public speaking ability, energy, enthusiasm, and ability to enlist the support of other organizations. The director should be aided by committees designated to secure architectural exhibits, material exhibits, planning and display, publicity and any other activities that local groups may deem it advisable to carry on.

The architectural exhibit can consist of "before and after" photographs and drawings of various types of buildings that have been modernized. Examples of work both local and otherwise should be shown. These exhibits should be accompanied by easily read charts giving the cost of improvements, year improvements were made, cost if made on the basis of today's prices, and the resulting increased value or increased revenue derived by the owner.

To stimulate the layman's imagination, a few modernization suggestions (*Continued on page* 82)

CAN YOU HELP?

After you have read this plan, please tell the editors of American Architect what you think of the idea and whether you believe it possible to conduct such an exhibition in your community.

If you have altered or modernized buildings, please send the following information:

1. Year built and year altered.
2. Cost of alterations.
3. Increased value or revenue derived by the owner as a result of reconditioning.

This information will be placed at the disposal of groups desiring to assemble photographs, drawings and data for exhibition purposes.

XUM

What Architects Can Do

A Practical Discussion of the Law as it Applies

AN agreement between architect and owner that the ownership of plans shall remain in the architect is valid and enforcible. Assuming that it has been agreed between the architect and his client that the architect is to remain the owner of the plans, what is the effect of such an agreement, and what is the situation presented where the owner, after paying for the plans in the first instance and having erected a building in accordance with them, proposes to erect another building similar to the first? How far will it be possible for him legally to use the plans in the erection of the second building or to copy the design of the first building, if the original plans are not available? Going a step farther, what right would a person other than the owner, who was not a party to the original agreement between the architect and the owner, have to copy the building and erect another one similar to it?

These questions present, broadly speaking, two different classes of cases, namely, cases where the issue lies between the architect and the client, and cases where it concerns the rights of third parties who have had no contractual dealings with either the owner or the architect.

If the architect has secured an agreement by the owner that the title to and property in the plans shall remain in the architect, the owner probably would not be able to use the particular plans prepared by the architect and covered by the agreement in the erection of another building. I am using "plans" in this connection in the sense of the actual drawings as distinguished from the design and layout itself. By agreeing that the ownership of the plans shall remain in the architect, the owner waives any right which he might have to demand that the architect furnish him with the same plans again for use on another building, without adequate compensation.

This does not, however, dispose of the problem presented where the owner, instead of demanding that the architect give him the actual drawings, has new plans prepared by another architect or by a draftsman, based on measurements of the building itself as erected. These plans, of course, would coincide, if the work is done correctly, with the original plans, but they would stand on a different basis. They would not be plans which were prepared by the architect, but rather plans which were prepared by some one else on the basis of the building which resulted from the architect's plans.

I doubt if the ordinary agreement that the ownership of the plans shall remain in the architect would be sufficient to give the architect a claim against the owner, where the owner has new plans prepared in this way and a new building erected from them. As between these parties, however, I see no reason why the architect and the owner may not, if they wish, in the first instance, legally agree that the owner will not use the plans or design in connection with other buildings, without the consent of the architect or without giving the architect a specified remuneration for such use. The courts have, in fact, recognized such an agreement to be proper and legal as between the architect and the client.

In the ordinary case, the architect has little to fear probably with respect to a subsequent use of the plans. In any case, where there is reason to apprehend that they may again be used, there is no reason why, in setting up the agreement between the architect and the client covering the work, the provision with respect to plan ownership should not be broadened along the foregoing lines, so as to provide specifically that neither the plans nor the design nor other plans based on the original plans or the design of the building as erected shall be used or made, without the consent of the architect or the payment to him of a reasonable or specified compensation therefor.

WHEN PERSONS NOT PARTY TO CONTRACT USE PLANS

When we come to consider the second phase of the matter, however, and the rights of third parties between whom and the architect no privity of contract exists, we are met with a different situation. Obviously, an agreement between the architect and his client can not be binding on someone else who was not a party to it and who probably had no knowledge of it. If such third party, taking a fancy to the house which the architect has built for Mr. Smith, sees fit to have his own architect copy the design and prepare other plans based on that design and use this material in building a second house for himself, the architect is in no position to claim that, because he had an agreement covering the ownership of the original plans, he can prevent the subsequent copying of his ideas or collect compensation therefor from Mr. Smith. It has long been held that the filing of plans with the Building Department amounts to a general publication of the plans and a making public of the ideas embodied in them. No amount of contracts between the architect and the client can prevent a third party, who has public access to the filed plans, taking a copy thereof and then using it for his own purposes. The only possible protection against this sort of thing lies along the lines of patent or copyright.

If the filed plans have been copyrighted or patented, the architect's relations with third parties rest on a different basis. Under these conditions, it seems logical that the ordinary laws of patents and copyright should apply and that the architect should be protected against the public generally as well as against the client with whom his agreement was made. Just how far the courts would go in granting protection along this line is somewhat problematical. It is safe to say, however, that, as a matter of general policy, they would be loath to extend the architect's rights in the plans to a point where

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to Protect Their Designs

to the Use of Plans in Duplicating a Building

BY CLINTON H. BLAKE
Blake & Voorhees, Counsellors-at-Law, New York

PLANS ARE OWNED BY THE CLIENT

WHO OWNS THE PLANS AND SPECIFICATIONS . . . ARCHITECT OR CLIENT?

THAT is a question answered by Mr. Blake in the February issue of American Architect. His article on the two pages in this issue explains what the architect may do to protect ownership. Since a proper understanding of this article is somewhat predicated on facts presented in Mr. Blake's previous article, we quote enough from it to sum up the main points then made.

"A very considerable majority of architects are still of the opinion that the plans and specifications are and remain at all times the property of the architect, irrespective of whether or not there is any agreement to this effect between the architect and the client. This is not and never has been the fact. On the contrary, the courts, since the earliest decisions on the subject, held and still hold that, *in the absence of a specific agreement* between the architect and the client providing otherwise, the ownership of the plans and specifications vests in the client who orders and pays for them; that the architect, by accepting the order and delivering the plans and accepting payment for them, relinquishes any claim to ownership with respect to them and transfers this ownership to the client."

it would prevent any future use of them whatever and that they certainly would not grant the architect any such protection, in the absence of a clear showing by patent or copyright that he is entitled to it.

TO PREVENT OWNER FROM LENDING PLANS

As a practical matter, the practicing architect will seldom find it necessary or advisable to apply for copyright protection, and it is only in extreme cases that patent protection probably will or can be sought. It will be an extreme case, also, in the practice of the ordinary architect where third parties will attempt to copy his designs. The danger that his client will make or facilitate the making by others of an additional and future use of the plans is more real. This is a danger which he can more readily discount and provide for by including appropriate provisions where necessary in the contract between the client and himself. For example, in such a case this contract might include, with respect to the ownership of plans, a provision in substance as follows:

"Any and all studies and sketches, plans, designs, drawings and specifications are and shall at all times remain the exclusive property of the architect and the owner will not hereafter make, or knowingly make it possible for others to make, any use thereof whatsoever on work other than that covered by this contract, provided that the owner may make such additional use thereof hereafter for his own purposes, upon securing the written consent of the architect therefor or upon paying to the architect an additional fee of ..... per cent of the cost of the additional work done in accordance therewith or based thereon, in the event that the architect is not called upon for any supervisory services and a fee of ..... per cent of such cost, in the event that the architect is requested to and does supervise the work."

The exact wording of such a provision can, of course, be varied to meet the case. Generally speaking, the architect and the client can, as between them, make any provisions along these lines by contract which they may think proper. Such an agreement will be subject only to the general rule that it must not contain any provisions calling for action which is illegal and the rule that third parties who are not parties to it or who do not in some way recognize it as binding upon them can not and will not be bound by any of its terms.

I have recently been shown a clipping reporting the case of an architect who designed a school building which was destroyed by fire and again reconstructed, as he claims, in accordance with his original plans. Assuming that it could be shown that the same plan and design were followed—and this, of course, should not be difficult to demonstrate—the architect in such a case would be protected and entitled to his additional compensation on the subsequent use of the plans, if his original contract with the school authorities had included a provision substantially along the lines suggested. While the cases in which such a provision would apply or be called into effect are probably rare, the benefit of the provision to the architect in the cases where it is effective may well be proportionately important.

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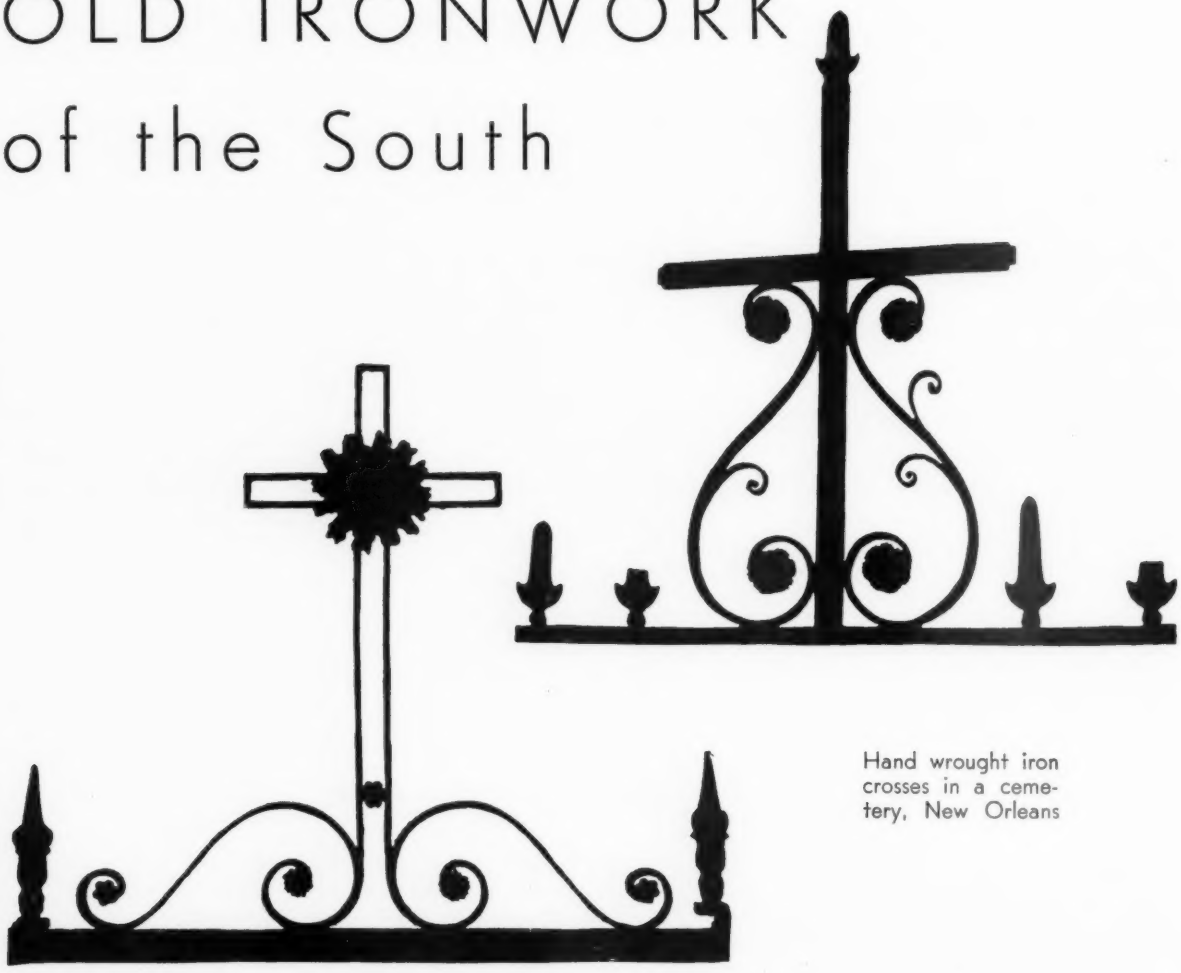
OLD IRONWORK of the South



Hand wrought iron crosses in a cemetery, New Orleans

Foot scraper, New Orleans

Foot scraper at "Rosedown" plantation, St. Francisville, La.

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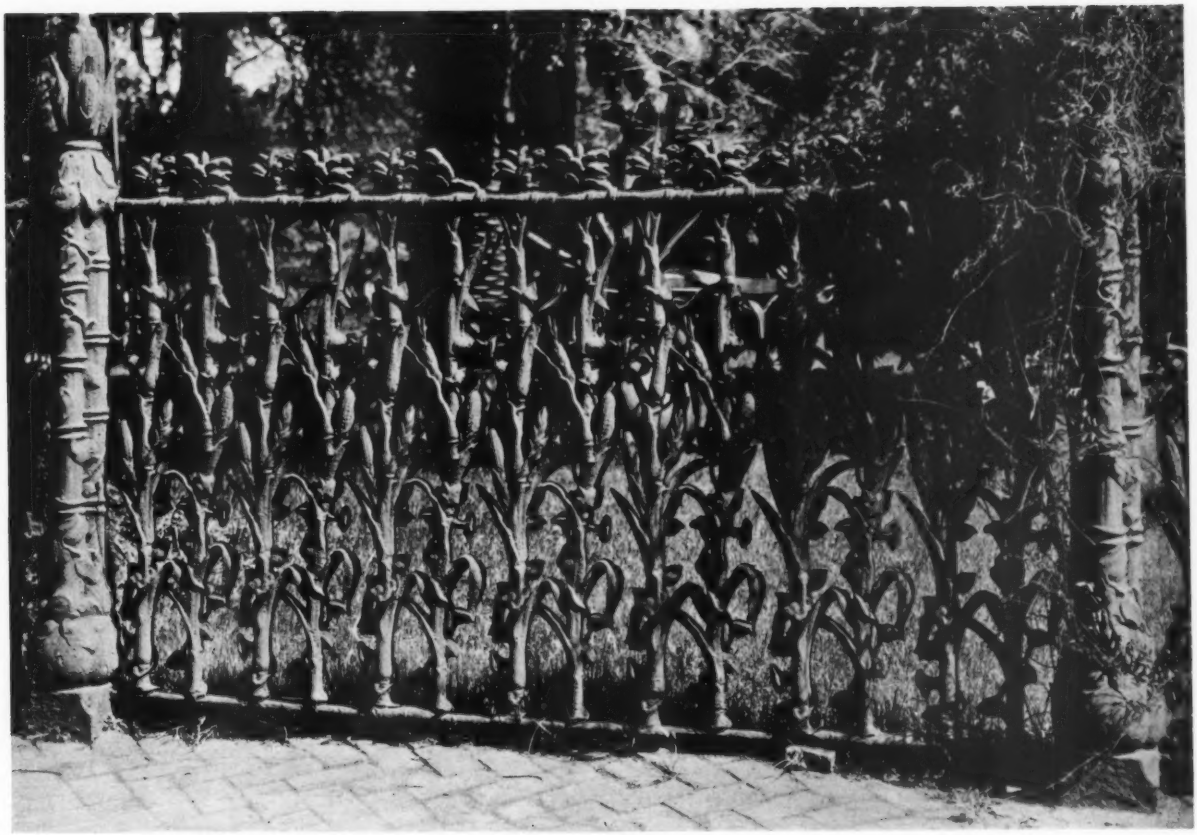
Stair rail, Market Hall, Charleston



"Cornstalk" fence, New Orleans

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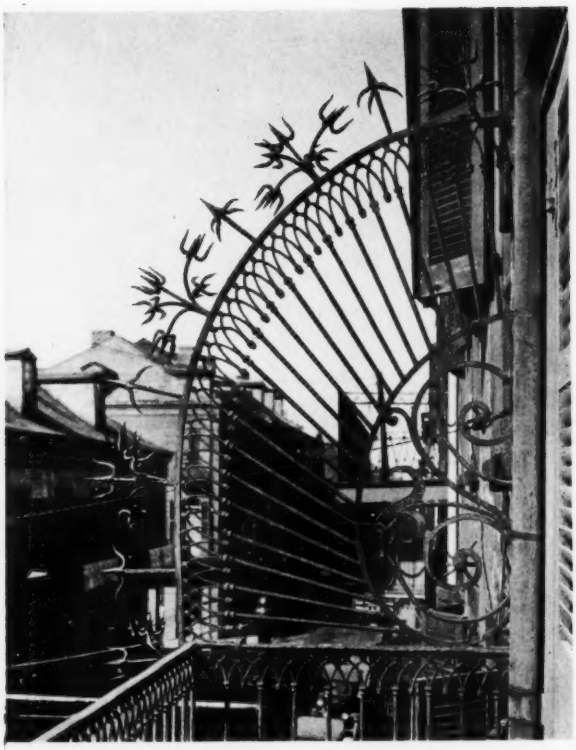

Balcony guard, Royal Street, New Orleans

Awning support in the old section of Mobile

Detail of "gate of the swords," Charleston

Gate in a cemetery, New Orleans

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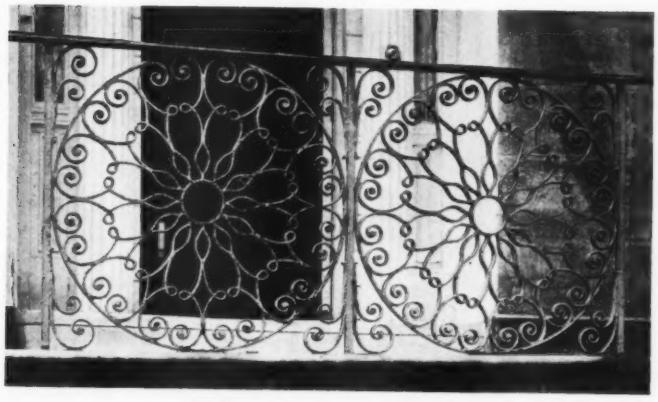
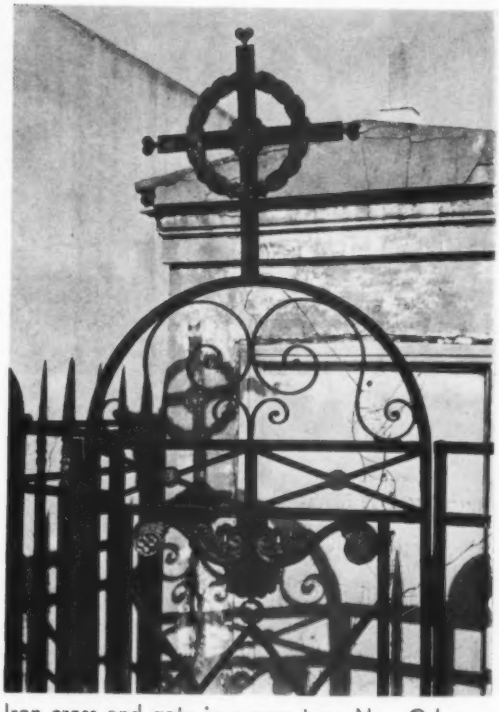
OLD IRONWORK OF THE SOUTH

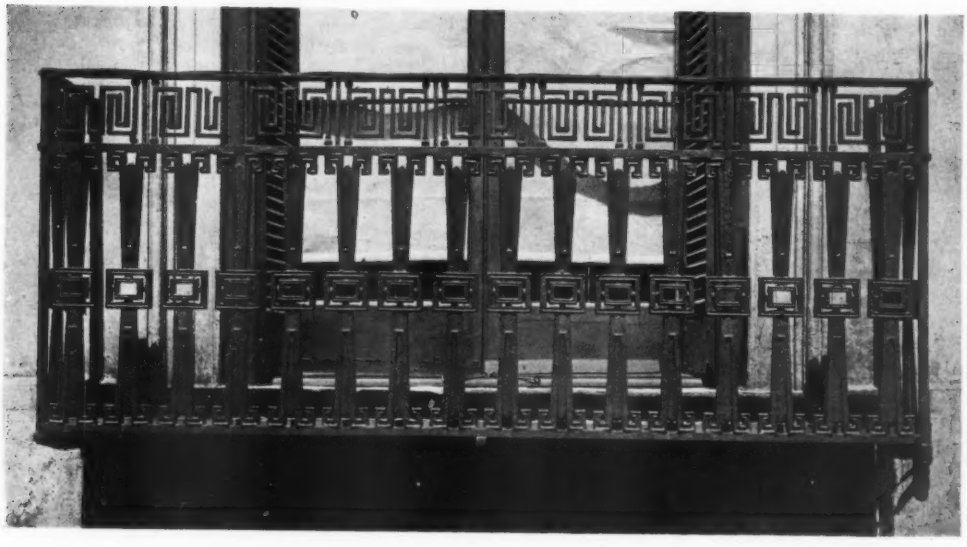
Rail at entrance, Savannah



Rail at entrance, Savannah

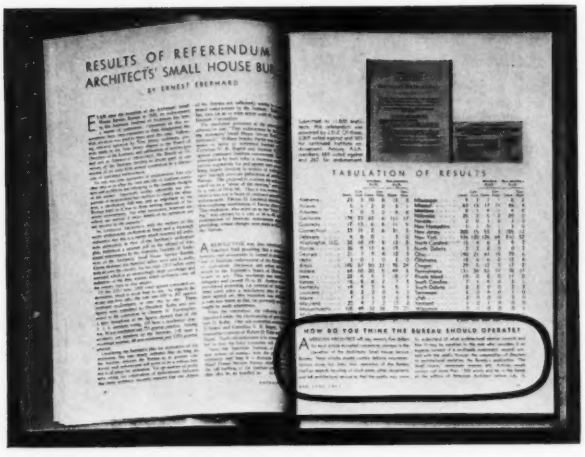


Iron cross and gate in a cemetery, New Orleans



Balcony on the Teffafaire Museum, Savannah

A Plan to Reorganize


RESULTS OF REFERENDUM
ARCHITECTS' SMALL HOUSE BU
BY ERNEST EBERHARD
TABULATION OF RESULTS
HOW DO YOU THINK THE BUREAU SHOULD OPERATE?

This plan seeks to remedy eight major defects of the Bureau: . . . 1: Insufficient concentration on the low-cost house as distinguished from the small house. . . 2: Failure to achieve substantial reductions in cost. . . 3: Lack of adequate organization and financial power. . . 4: Lack of a financing plan (recently provided). . . 5: Absence of coordination of Bureau, architects and building industry. . . 6: The unhappy selection of a name. . . 7: Unwise method of distribution. . . . 8: Excessive conflict with individual practice

BY C. JULIAN OBERWARTH, A.I.A.
Secretary and Treasurer State Board of Examiners
and Registration of Architects, Frankfort, Kentucky

OUR arguments anent the Architects' Small House Service Bureau approach the unreasoning violence of those on prohibition. The pros vigorously resist every move of the antis; the antis accept the efforts of the pros like angry bulls receive the tantrums of egotistical toreadors; and the in-betweens sit grinning in ring-side seats, enjoying a fight the true gravity of which they fail to grasp.

If there were not some deserving arguments for and against the Bureau the heat of battle could never have become so intense. Yet, instead of digging in and correcting the bad features and building up to achieve a worthy objective, we have toyed with a problem so great, so urgent, so thrilling as to command world-wide attention, and done nothing more than to argue, bitterly, whether the movement shall be led by the leaders—The American Institute of Architects!

That the Institute has, in convention assembled, reverted to a policy of arbitrated study, reflects the sound judgment of its delegates. To have continued to endorse the Bureau under a barrage of justifiable criticism would have been irrational. To have scrapped the Bureau, with its years of accumulated knowledge and experience, would have been as shamefully childish as destroying a valuable watch because its main-spring was weak.

Now that we are in a position to remould this organization into a constructive piece of machinery, let us do it in a manner becoming master planners—as carefully as if it were a hundred million dollar commission, for that is exactly what it is.

The small house is the heart of our national, political and economic structure. The building of one home creates a demand for all of the world's products and services. It creates American Citizens. It is the source of demand for schools, factories, churches, commercial buildings—a fact which, in our mad rush for favor and fortune, we had forgotten. I am told that an appreciation of these principles underlies Sears, Roebuck's decision to build houses. That appreciation is not general may be seen from the fact that President Hoover's recent conference on housing exposed a condition so astounding, so ghastly, so utterly neglected, that we dared not recognize our own responsibility in the matter. At the same time it laid bare a field of opportunity that is literally crying for honest exploitation. The depression, itself, has so turned the tide of life toward normal things that not since pioneer days has the desire to own a home so filled the hearts of men.

An article in "Fortune," commenting on the situation, says, " . . . the industry (building) has failed to reach a market which, exclusive of families living on farms, amounts to 14,500,000 to 15,000,000 families; . . . if the industry could build a *good* house to sell at $4,800 it would add 60 per cent to its small house sales in its *present* market. . . . If the industry could build a *good* house to sell at $3,600 it would double its post-war output, which in 'normal' years has amounted to $3,000,000,000 and invade the *new* market."

As staggering as that truth is, it does not go into detail of source which, if we investigated it, would show that even the market which the industry *has* reached has

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the Small House Bureau

been exploited with poor planning, materials and construction through lack of architectural service.

Who now, but architects, have the position and training to solve this problem? I tell you here is a duty and a challenge that we can not, must not, fail to heed. Well-conceived action is essential, architectural leadership paramount. There must be no failing, no stalling, no shirking; else disaster will ensue, attended by tremendous loss of prestige.

We know that builders of low-cost homes want a simple, sure and direct method of handling their programs as unit-price transactions, and that their wants will be supplied regardless of whether we, or those less qualified, supply them. We know, in our hearts, that it can not be done through individual practice; and if we are to find a practical solution we must base our actions upon the same clear conception of the conditions and requirements and resort to the same analysis, logic and perseverance that evolves any successful plan.

Our problem is: To give potential builders of low-cost homes the advantage of good plans, specifications and supervision at prices within their reach; to foster and perpetuate universal appreciation of good architecure and architectural service; to make the cost and value received so attractive and superior as to eliminate others in the field; to guide all planning through the hands of competent architects; and, finally, to direct our organized efforts toward those who can not afford the independent services of an architect, in such a way as to cause the least possible conflict with private practice.

THE Bureau is our preliminary study and, as such, needs certain changes and development. Here are its major defects: 1. Insufficient concentration on the *low-cost* house as distinguished from the *small* house. 2. Failure to achieve substantial reductions in cost. 3. Lack of adequate organization and financial power. 4. Lack of a financing plan (recently provided). 5. Absence of coordination of Bureau, architects and building industry. 6. The unhappy selection of a name. 7. Unwise method of distribution. 8. Excessive conflict with individual practice.

Number seven is the unfortunate cause of number eight. There were reasons, of course, for its adoption; but of this I am certain, unless, and until, we concede the necessity of distribution strictly through the hands of architects, there is not a ghost of a chance for ultimate, far-reaching success. Antagonism and resentment within our own ranks will grow and expand until they blow up the whole works—and I would be willing to light the fuse.

Two years ago I told a prospective client who insisted on the economy of stock plans that I would get him a good set, made by the Bureau, if he would let me supervise the work. He laughed at me. "Why," said he, "I can get the same plans for nothing down here at the Blank Lumber Company and they'll save me the cost of supervision."

What mockery to find that we are competing against ourselves! What priceless irony that we should do it, even partly, through the hands of building material dealers and contractors (highly unethical under our own standards) and let the American Institute of Architects, the endorser, take the blame for whatever results! It is hard enough to get men to follow plans under constant supervision. Lord only knows what they do when let alone.

UNDER the direct leadership of the Institute, with the active assistance of every branch of the building industry, let's take the Bureau and build it up into a strong, efficient organization more suited to our needs.

Let its first consideration be given to the study of materials, methods of assembly and construction. Select the best, from the standpoint of low cost, efficiency, quality, adaptability and appearance and reduce and standardize them, consistent with reasonable latitude in design, to assure large-scale mass production. Agree upon their use at a fair price, eliminating the cost of salesmen, sales literature and middle men, handling distribution directly through local firms. Let the data compiled by the Hoover Conference be made available and its work perpetuated.

Thus armed, we will be ready to plan good houses at costs so reasonable that we can reach and monopolize any market. But let's go further. Let's enact and re-enact state laws to exclude house plans made by other than qualified architects. Certainly, by now, we have learned the folly of timidity. It should be our *duty* to use every honest legal means to blot out unqualified service. What, do you think, would be our standard of health if the medical profession, itself, had not closed the doors to those unqualified to practice medicine?

Let plans be created in every style and design, beautifully presented and seductively illustrated. Include suggestions for furnishings and equipment, treatments of yards and gardens—everything to make them complete and highly desirable. Provide a division of this service devoted to farm buildings and invade this long-neglected, fertile field. Let plans be submitted by private architects and the appropriate ones re-worked to the organization's requirements. Let all finished plans be copyrighted, published and distributed *only* through architects. Thus would all changes be under proper direction and supervision, competitive bids and reliable contractors assured. Thus, too, would all work, whether individual or collective, be directed through the proper channels, to the advantage and profit of architects as well as the general public. *The plans of the organization, being limited to stock materials, would appeal principally to those who could not afford wider variety. Those who can afford it will, and usually have, sought the individual services of an architect.*

The final act of distribution should be so arranged as to allow architects to offer the complete job, plans, services, house and all, for (*Continued on page* 98)

Dr. Steinhof teaches the student to: (1) Build clay vases as he would a building. (2) Harmonize volumes. (3) Translate these fundamentals into a building model

A New Way To Teach Architecture

BY DR. EUGENE G. STEINHOF

Architect; Director, National School of Decorative Art of Vienna, Austria

DURING the past eight years, I have developed an entirely new approach to the teaching of architecture in my own courses, for at the National School of Decorative Art of Vienna each professor develops his own system of teaching and selects the subjects to be taught. My teaching method embraces the study of the fundamentals of architecture as an art, the teaching of modern building design as the uniting of art with life. Art of the past is taught from the viewpoint of its creative value and construction is interpreted as the natural fusion of the idea with the material. The method introduces architecture to the student through the study of architecture by building rather than by drawing.

The curriculum is based upon:

1. Instruction in the art mediums of architecture, that is, architectural space, surface and color.
2. Analysis of use of building.
3. Teaching of construction through study of actual projects, as well as historical monuments as creative structures.

Instruction in the art mediums of architecture is designed to develop in the student an understanding of architectural space through:

a. Observation of nature in her spatial manifestations: crystals, etc.

b. Discussion and observation of the proportions of rooms of existing buildings. Room dimensions are noted for future reference and the student thus becomes accustomed to associating dimensions with space.

c. Transparent models are made to permit the study of space as to its inner appearance. The student is taught to observe in his transparent model the connection which exists between the inside and the outside of the structure. By this new method the student acquires in a short time a clear conception of enclosed space.

The subject of enclosing walls or architectural surfaces is taught in the following manner:

The architect must have the ability to produce wall planes which correspond to his creative intention. Therefore the student must acquire skill in differentiating between subtle tones. To give him this skill, the surface of the vase is studied. For this purpose the vase is not viewed as a decorative object but as the unfolding of a plastic surface in light. Vases are built from below upwards as a wall of clay—like the wall of a building. After three or four vases have been executed, the student has obtained more experience in plastics than he ever would have acquired in copying plaster casts.

The modeling of a building surface is then taught by building up opaque plastic cubes. The student quickly learns to design masses in an artistic combination.

To forestall a possible recrudescence of copied ornamentation, the student learns the movement and rhythm which control and produce ornamentation and he sketches ornamentation in relation to the materials to be employed. Color, in the case of the architect, must be taught with regard to its connection with the enclosure of space.

Since the purpose of a building is no longer based

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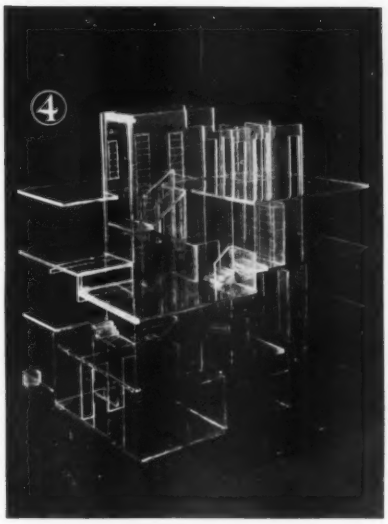

After writing out the problem as a narrative, the student studies the inner space arrangement by making (4) a transparent model of celluloid. When the plan is established, the space model is enclosed with transparent walls as shown at (5), and the outer shell and masses developed with opaque walls as shown at (6)

upon living conditions of a past age, the student must study how people live today. Therefore, before the student makes a plan for his project, he studies the daily life of those who will use the building. He is required to describe this in minute detail. In doing so, he enters deeply into the purpose of the building. Out of these synthetic studies, the student attains a clear conception of his problem and the building idea becomes architecture. At this point the architectural student drops the pencil and begins to build. Without previous plan making he expresses his conception by constructing models.

The method can best be demonstrated by describing the work of a typical student. The project shown in the accompanying illustrations is the first architectural work undertaken by the student after he has been trained to model vases and harmonize volumes.

Closest to the life of the student is the home of his own family. This consequently forms the basis of his first project. In the case illustrated, the family consists of the student's parents, three children and one or two maids. The father, a playwright, wants to live and work on the top floor. The children live in the middle floor. The first floor contains the social rooms.

IN the illustration at the top of this page, the student is shown at work surrounded by the results of his studies in harmonizing volumes and modeling vases. After the volume studies, he wrote, as a narrative, the requirements of the life to be embodied in his first building study—a house for his family. After completing this preliminary study, he made a plaster model containing the general building requirements but without structural requirements. The plan of the building is marked on the base of the model. The natural human urge to bring an idea into concrete form creates active interest in the student to construct his house and develops in him the desire to learn how it is built. Having satisfied this desire, he makes a third model (4 and 5) with transparent walls in which he studies the inner space proportions and the inner arrangement of the building. When satisfied with the result, he covers his space with its outward shell. Creating the surface of his building by enclosing the model with opaque walls he develops the cubic volumes of the building masses as shown at 6. This procedure has given the student a clear and architectonic conception of his building; it was born by enclosing space and not by studying it as a paper project. He completes his project in about three weeks.

AFTER having produced several projects, the young student develops surprising skill in the practical and artistic analysis of a building. From the beginning, poor planning is avoided because every mistake is immediately seen, and the artistic side of the enclosure of space is revealed.

The project shown in the illustrations was conceived according to living conditions and building practice in Vienna.

Construction is taught as a constructive fact by practical demonstrations. Consequently, without the usual detours, the beginner is enabled to start at once with the problem as a whole: to organize a real building and understand its construction.

In most schools, instruction in the history of art is seldom more than an attempt to give esthetic appreciation. A teaching method, the aim of which is creation, must teach the past not from the viewpoint of knowing but of actual doing. This theory, in teaching architectural history, is new and extremely broad in scope in that it views the history of art as an interrelation of art form and world events; as a connection between an age and its people; as an interpretation of artistic individuality modified by the age and as a connection between art form and creative tool.

We are building today a future generation of artists. We must stop inculcating esthetics instead of art; we must not substitute an historic conception of art for living art. We must go back to the fundamentals of the architectural structure, back to the awakening of the artist's soul and back to the life which we live. We shall then have a true concept of modern architecture.

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Presenting "SPACE" to prospective tenants

BY

ARNE ARNTZEN
President, Interior Layout Corporation, Chicago

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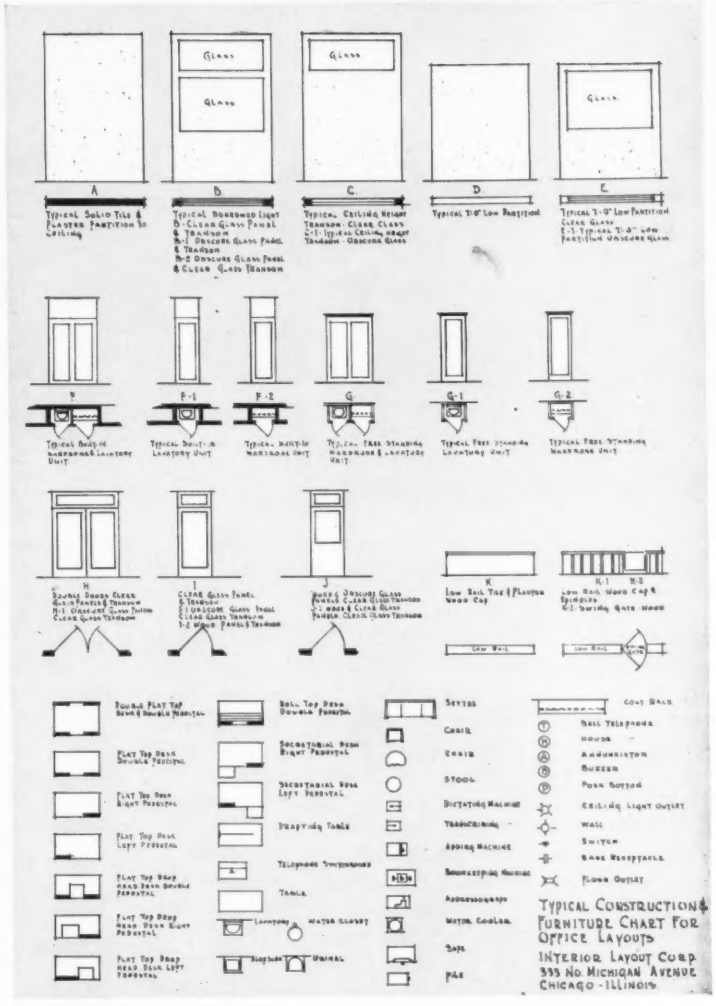


Indication of Details Developed for Office Layouts

THE most satisfactory subdivision of tenant space is a problem that has grown increasingly important in the development of office buildings. This has brought about the organization of groups of "Office Layout Specialists," a service intended to bridge the gap between architect and building manager.

Perhaps the necessity for organizations of this nature can be attributed to the demand on the part of prospective tenants for more efficiently arranged offices, better grouping of departments, more study given to the "flow of work" from one department to another, and how these considerations would necessarily affect the layout. The architect is usually too busy with activities directly related to the building to be in a position to spend any considerable amount of time studying the exact requirements of each individual tenant.

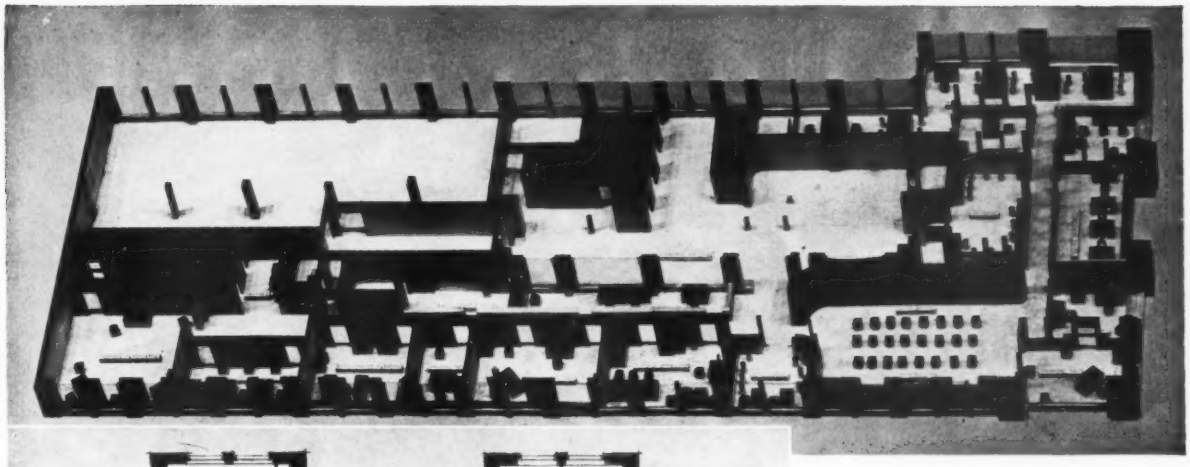
This detail work is often taken care of by a layout organization, which should for all practical purposes limit itself entirely to the study of the tenant's requirements and visualization to the tenant. When the tenant has indicated approval, the information should be turned over to the architect as a basis for working drawings.

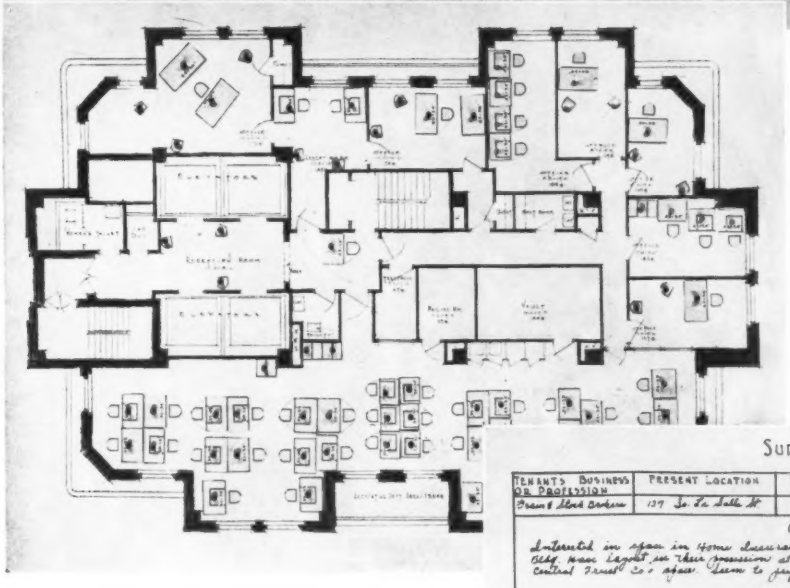
Inasmuch as selling of space starts before ground is broken, adequate presentation of space demands considerable ingenuity in developing satisfactory solutions.

In most instances visualization of the space in question cannot be conveyed or adequately portrayed to the average tenant through blue prints, even though the entire furniture set-up is indicated. This fact has lead to the development of other forms of presentation.

In order to prepare a suitable study of the space, it is essential that a layout organization get the exact picture of the tenant's requirements. A complete survey of the tenant's present quarters is made. If the tenant has a plan of his present space, it is well to utilize this as far as possible. Inquiry should be made as to whether or not any changes have been made subsequent to the issuance of this plan. In many instances the tenant may have taken over additional space and failed to make a note of it on the prints. A conference should be held with the office manager or other executive in charge of the problem of adjusting requirements to new space and every detail, no matter how insignificant, should be discussed with him, noting carefully his comments and suggestions.

This done, the furniture should be checked and noted. A standard chart can readily be prepared to facilitate listing the furnishings in the various offices. After securing the necessary data, taking into consideration the need for additions and future expansion, studies are made of the





PROSPECTIVE TENANT'S furniture is listed on the "survey chart' shown below. A layout is prepared for him. This layout may consist of the plan with colored pieces of paper to represent furniture as shown at left. Or it may be a model as shown above. With either method the prospective tenant may try other arrangements if desired

SURVEY CHART

TENANT'S BUSINESS OR PROFESSION	PRESENT LOCATION	EXECUTIVE IN CHARGE OF TENANT LAYOUT	HIS PRESENT POSITION WITH FIRM
Grant & Lloyd Brokers	137 So. La Salle St.	Mr. Nelson Barnes	Officer

COMMENTS

Interested in space in Home Insurance building also ground floor in Board of Trade Bldg. now occupied by their corporation at present showing all up of space on ground floor Central Trust Co. space. Seem to prefer ground floor area.

ADVANTAGES OF PRESENT LAYOUT	Large unobstructed board room.		
DISADVANTAGES OF PRESENT LAYOUT	Too many floors scattered. offices too small.		
NET RENTABLE FLOOR AREA	Approx. 7000 ft	PRESENT REQUIREMENTS ample	PRESENT REQUIREMENTS insufficient
SUGGESTIONS AS TO PROPER GROUPING OF OFFICERS	Mr. Babcock desires to have board room, order room, adjacent also he close to board room, desires one of Mr. Johnson offices and eliminate two private offices shown, Eliminate all departments on 2-3 floors and combine on proposed layout		
WARDROBE FACILITIES	LAVATORY FACILITIES		
AMPLE / INSUFFICIENT	AMPLE / INSUFFICIENT		

PRESENT FURNITURE LAYOUT

CLASSIFICATION	DESK SIZE	TABLE SIZE	SETTEE SIZE	BOOKCASE SIZE	FILES SIZE	SAFE SIZE	CHAIRS SIZE	TELEPHONE STAND-SIZE	WARDROBE LAY-SIZE	ADDITIONAL FURNITURE
PRIVATE OFFICE Mr. Babcock	1-84x40				2-15x22		4-22x22			
PRIVATE OFFICE Mr. Johnson	1-84x40 1-32x20				2-15x22		4-22x22			
PRIVATE OFFICE Mr. Knudson	1-84x40 1-54x30				2-15x22		3-22x22			1 Locker 2'
PRIVATE OFFICE Mr. Savage	1-54x30				2-15x22		22x22			
PRIVATE OFFICE	1-84x40						2-22x22			

layout for the new location. After a satisfactory solution is found, a suitable presentation is made for the client.

Besides the pencil studies of space, another method in vogue is the "template" form. A typical un-subdivided floor plan showing only the utilities, columns, etc., and usually made at quarter inch scale, is mounted upon a base made up of cork or other material into which one can pin without difficulty.

The essential characteristics that make up a layout are the partition walls, borrowed lights, lavatory and wardrobe units, low partitions, railing, swing gates, etc. Since in most cases these are of standard sizes, they can be printed in advance on cardboard or heavy paper. This is likewise true of the furniture, different colored cardboard being used for various types of desks, tables, etc.

These items are cut out from the printed standard forms and pinned down to the cork base, using small round headed pins. The color of the heads of the pins should preferably correspond to the color of the cardboard or paper. Light outlets are also indicated by this method. The names of various departmental heads, etc., are typed on a separate sheet of paper and pinned down to their designated position. Necessary notations are typewritten and secured to one side of the layout.

The principal advantage of this method of presentation over a drawing is that it is a nearer approach to the tenant's conception of what a layout should be like than is a blue print or a pencil sketch. It is also considerably more flexible, since if the prospective tenant does not like the particular location of his desk in his office, he merely loosens the pin and up comes his desk, and he can maneuver it around to his heart's (*Continued on page* 94)

XUM

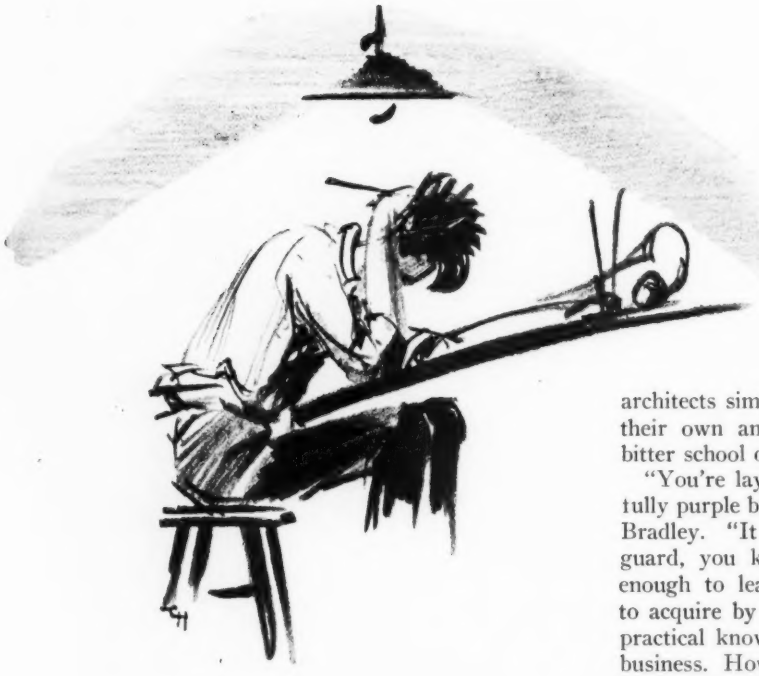
OSTE

PONTE FABRICIO, ROME, BUILT 64 B.C.
A DRAWING BY EARL HORTER

LA RUE DE L'HORLOGE, DINAN, FRANCE
AN ETCHING BY WOODRUFF K. AYKROYD

XUM

How to



"We are inadequately trained in the business of architecture"

HOW to make a living out of architecture? Interesting theme that! Small wonder the conversation grew heated around the luncheon table at the Pepper Pot Coffee Shop. It is there that the Architectural Iconoclasts meet with an easy informality to air their opinions, grievances, or what have you—and they usually have plenty! If one enjoys a pithy verbal tilt and is blessed or cursed with a reform complex, he can generally find satisfaction at one of these noon seances convening at the Pepper Pot. The other day I happened in for lunch and the usual talkfest was on, with "sound effects," as they say in the movies.

This particular round seemed to be for the purpose of settling the question of how our exalted and dignified profession of architecture could be made to support its harassed and scrambling devotees. And friends, the writer respectfully takes his hat off to the lads who could settle, over a luncheon table, such a question.

Jackson Lee was holding the attention of the assembled Iconoclasts. His dark, expressive face was twisted into a wry smile as he whimsically spoke.

"How can we all make a decent living out of architecture? It has me stopped. To date it is the lost chord with me. I can't seem to even hum the tune. Y'know, fellows, the thing that riles me is the way in which we architects are chucked out into the deep swirling waters of professional practice from the architectural schools, with little or no business preparation—sans the know-how to swim. It's tough on the victim and hard for his competing fellow swimmers who clutter up the ocean. How little practical knowledge there is, in available form, to help us cope intelligently with the business problems of architecture—architectural economics, you might say. The average architectural course in our universities gives us little or no information about it, though I will admit there are a very few who claim to be notable exceptions. We can turn to few architectural associations for this helpful information. Young architects simply have to blunder forth into business on their own and pay the ruinously high tuition of the bitter school of experience."

"You're laying in a sad picture, Jack, with a mournfully purple brush," laughed the plump and witty George Bradley. "It may be that the intelligentsia—the old guard, you know, thinks that because we are bright enough to learn the theory of architecture, we ought to acquire by the try, blunder and bust method enough practical knowledge to save our scalps in the battle of business. However, the lack of business training in our education has rather gotten under my skin too, and so at the last meeting of the Chapter, when I found myself sitting next to Dean Keppering of the State University School of Architecture, I fired these questions at him:

" 'Dean Keppering, why doesn't your school have a course which will give your boys some idea of practical office methods—give them information on how much it costs to start in business—how much to run an office—how to compute overhead—some knowledge of the cost of making sketches—of producing plans, etc.? Such a course could be condensed—made short and snappy, and it might save the boys years of mistakes and the discouragement which comes from floundering around trying to find themselves. An intelligent instructor, backed by reliable data, could save them much painful experience. How to build up their practice would cer-

"When I studied in Paris . . ."

Make a Living Out of Architecture

BY CHARLES KYSON
Hollywood, California

Drawings by
LANSING C. HOLDEN, Jr., A.I.A.

tainly be interesting to the boys and of course of value to them, whether they were in business for themselves or working for another architect.' "

"And what did the Dean say, George?" demanded an interested listener.

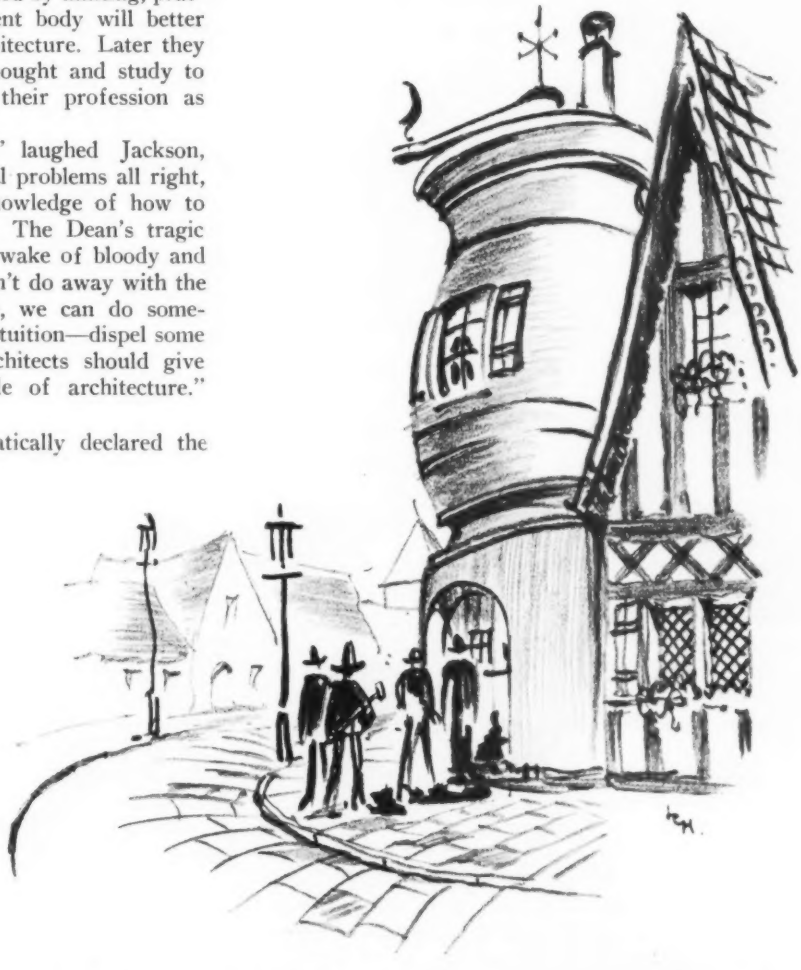
"Well, here's his answer as I remember it:

" 'Yes, there is something in what you say, Mr. Bradley. We of the faculty have talked it over, but we have decided that it is inadvisable. We believe that our function is to inculcate high architectural and artistic ideals in the minds of our students. We believe in letting them study architectural design untrammeled by limiting, practical considerations; thus our student body will better absorb the theory, the ideals of architecture. Later they will have plenty of time to give thought and study to the practical, mundane phases of their profession as they need them.' "

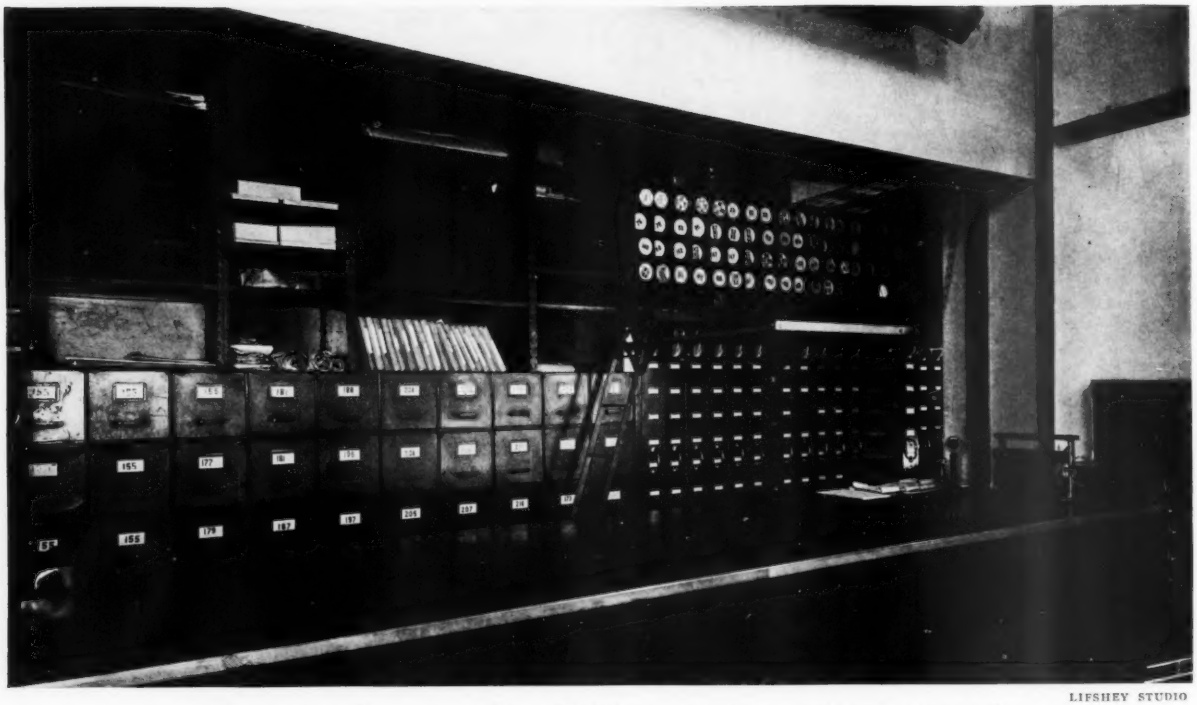
"And his students, poor devils," laughed Jackson, "they will meet up with the practical problems all right, but solving them, without some knowledge of how to do so—well, that's something else. The Dean's tragic method leaves such an unnecessary wake of bloody and bowed heads. While I admit we can't do away with the much-vaunted school of experience, we can do something to cut down its ruinously high tuition—dispel some of this high-priced ignorance. Architects should give more thought to the business side of architecture."

"BUSINESS, that's it!" emphatically declared the gray-haired Juan Munroe, an architect with a record of accomplishment. "As our profession is practiced today it is only partly an art. It can scarcely be described, properly, as a profession. It's really a business—though I don't exactly like that description of it either. And yet my actual experience has been that eighty-five to ninety per cent of my time in it is spent as a business executive—either getting business, administering it through the office, preparing financial set-ups of buildings, estimating costs, writing specifications—well, just business routine. Why, if I am able to devote ten per cent of my time to the artistic phases of architecture, I'm lucky. So, it looks to me, too, as though our problem in architecture is that of putting art on a business basis."

"That's my problem, too, Julian," eagerly contributed James Cameron. "When I went to college and studied in Paris, design was my specialty. I learned to make flashy sketches and grand plans. Since I have been practising I have pretty nearly forgotten how to make a presentable sketch. The thing (*Continued on page 97*)



"Where the Architectural Iconoclasts meet to air their grievances"



LIFSHEY STUDIO

A fire resisting filing room, office of Schultze and Weaver, architects, New York

An Economical Solution of the Fireproof Filing Room

BY GEORGE H. ALLEN

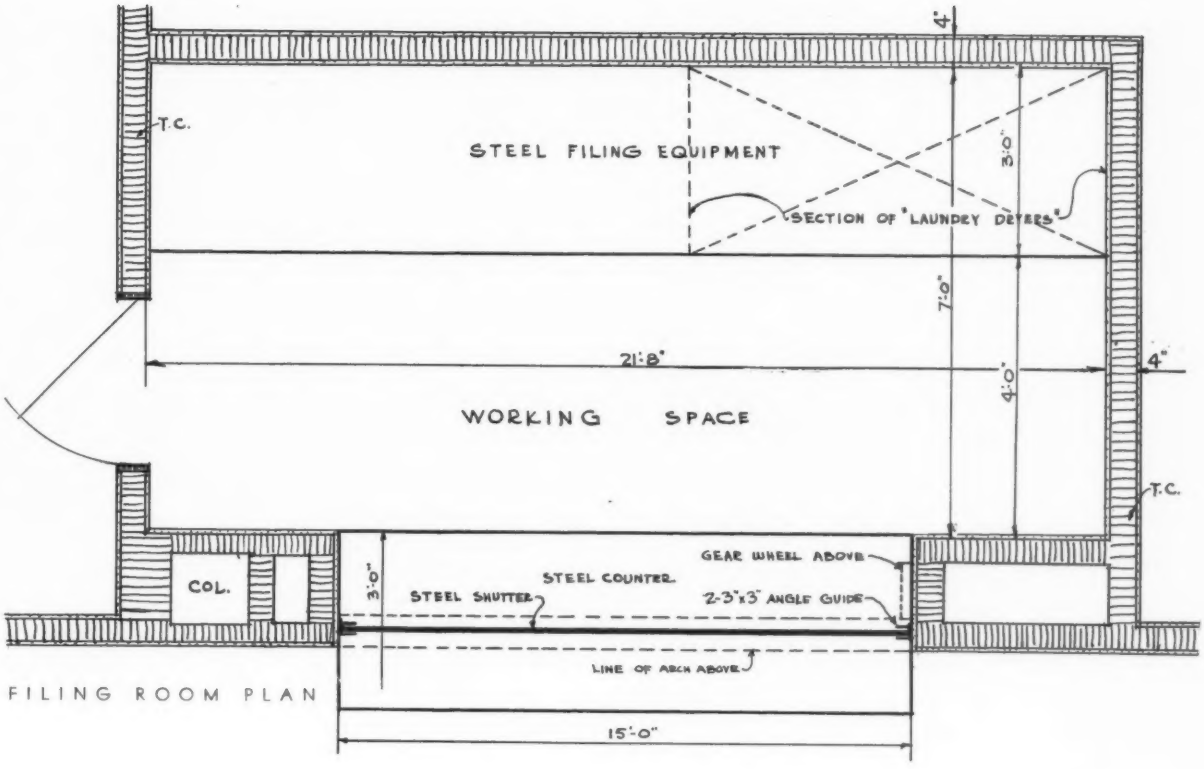
FIRE risk is an ever present danger, yet most architectural offices take but few precautions against it to safeguard valuable drawings. The general practice has been to file all drawings in semi-fireproof cabinets or drawers. But this does not afford sufficient protection. The logical solution is to have a fire resisting room but the cost of this is usually considered prohibitive. Schultze and Weaver, Architects, New York, have found an economical solution to the problem.

This office has a large number of drawings including working drawings, details and full-sized sheets. It was desired to have all files in a compact space, immediately accessible to the draftsmen and protected from fire. The main drafting room is rectangular in shape, 60 feet long and 25 feet wide. It is bordered on three sides by windows and on the inner side by a 4" tile partition which divides it from the other offices. An opening was cut into the wall 15' long and 8'6" high, approximately in the center of the drafting room. The lintel is supported by a steel channel beam which is imbedded in the wall at the jambs.

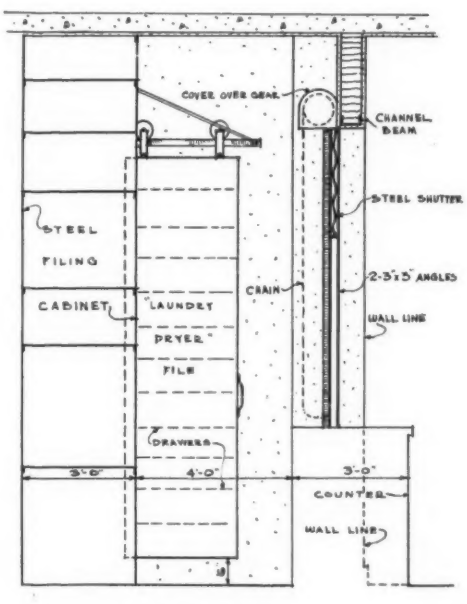
A steel counter 15' long and 3' deep was assembled in sections and fastened directly to the finished cement floor with screw anchors. The counter is flush with the wall at the inside of the filing room and projects on the outside—due to the width of the columns at the jambs—about 18". The counter is of typical construction with steel sides and drawers and a green linoleum top which is glued and fastened down with a brass edging strip. The generous working space of the counter allows a number of men to be there at the same time without their getting in each other's way.

The channel beam at the lintel of the opening has a ½" steel plate bolted to it on the inside. This in turn serves as a firm support for a rolling steel shutter, similar to the roll doors used in factories. At each side of the jambs a 3"x3" angle has been fastened to the masonry with anchor bolts, which serves both as a guide for the shutter and as a fire-stop. At one end of this shutter is a cog wheel operated by a chain.

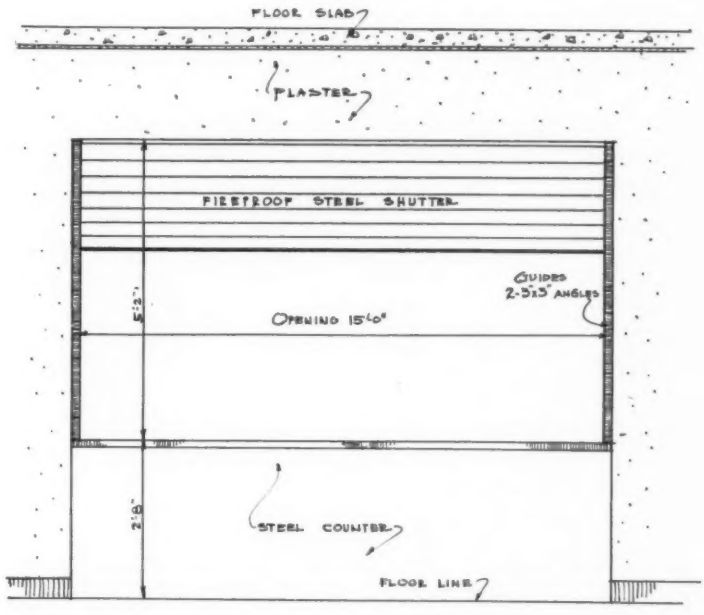
The wall at the back of the filing room has been built out with various types of steel filing equipment, housing every drawing ever made by the firm and with the necessary provision in taking care of future expansion. In the lower left side of the wall are steel filing drawers which take the usual 8½"x11" sheet. In these are filed



FILING ROOM PLAN



SECTION

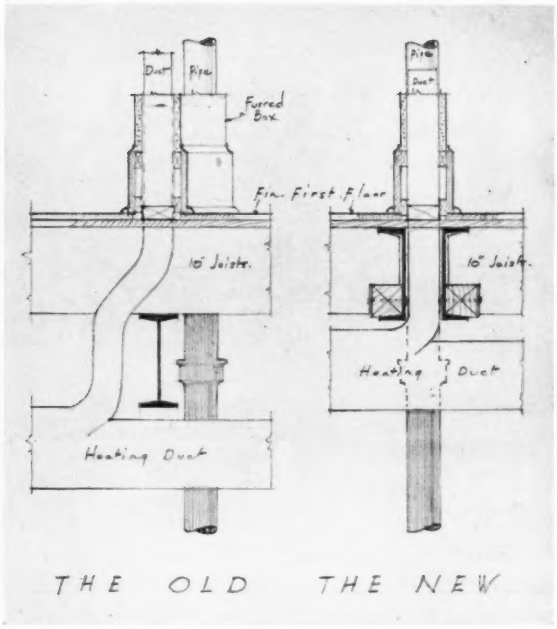


ELEVATION

all full-sized detail sheets. Directly above these drawers are steel shelves upon which are kept the record books and various miscellany. To the right of the drawers are about 25 vertical files which were originally "laundry dryers." The steel cases were constructed to fit a drying cabinet, which consists of projecting overhead tracks, upon which ride a series of wheels. These steel cabinets pull out easily and each contains 10 horizontal half-round shelves. All of the working drawings are rolled and kept in these files. Directly above the "laundry dryers" are steel pigeon-holes, approximately 6"x8" which are used to house round steel cases 4" wide and 44" long. These are used to store all drawings of inactive jobs. To reach these cases a narrow iron grating cat-walk has been constructed above the projecting arms of the "dryer" files; this is reached at one end by a removable steel ladder.

XUM

. . . Things You Didn't



• MORE HEADROOM IN CELLARS

By G. Frank Cordner, A.I.A.
Detroit, Michigan

A METHOD for solving the duct and pipe problem increasing headroom in the basements of frame houses is shown in the accompanying drawing. The usual I-beam or wood girder placed below the joists causes the heating ducts to be run below it and cuts down the available headroom by that much. Also plumbing stacks have to be run to one side of the girder.

In place of the I-beam use two channels, back to back, but separated. The distance between the channels depends on the pipe or duct size; 4" will accommodate a 3" cast iron soil stack 5" a 4" stack, etc. Separators consist of a small section of steel channel bolted to each channel every two feet. Should one of them come in the way of a duct or pipe, it can be removed without affecting the strength of the girder. The cost is no greater than building the basement walls 8" or 10" higher and is, in fact, probably less.

• MASTER LIGHT SWITCH IN GARAGE

By Edwin F. Simpson, A.I.A.
Dayton, Ohio

TO enable the occupant of a residence to light his way from the garage to the main part of the house, install a master-switch in the garage to control lights in the garage, kitchen, serving pantry, dining room and main hall or whatever course one might take going to and from the garage. Another master-switch should be installed in the main hall or living room.

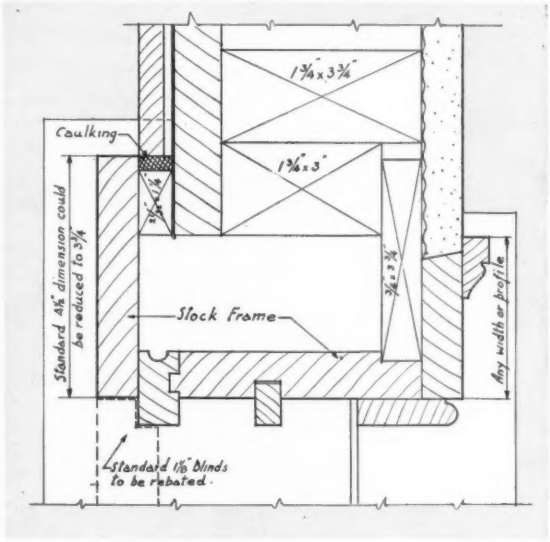
These master-switches operate to turn on all of the designated lights at one time independent of their local switches and must be turned off again by one of the master-switches before the local switches are operative.

This method eliminates the turning on and off of lights in going from the main part of the house to the garage or vice versa.

• CLOTHES LINE AT ANY POINT IN LAUNDRY

By Edwin F. Simpson, A.I.A.
Dayton, Ohio

TO facilitate the application of clothes line hangers in laundries of houses, insert in the concrete a bevelled board 1" x 4", seven feet above the floor—running continuously around the room. This eliminates the drilling of holes and permits the occupant to fasten the clothes line at any point in the room.



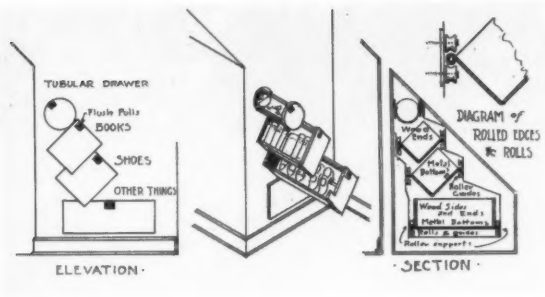
• NARROW TRIM FOR DOUBLE HUNG WINDOWS

By Alfred Mausloff, architect
New Canaan, Conn.

THE accompanying detail for narrow trim on double hung windows is felt to be an improvement on that published in the March 1932 issue of AMERICAN ARCHITECT. The detail provides for a rigid construction which will secure the window frame to the studding and at the same time provide good nailing for interior trim. It utilizes standard window frames and is adaptable to almost any size or profile of trim. The inside casing can be used as a plaster ground or, if preferred, a temporary ground can be applied.

In order not to have the exterior casing project too far, note that the blinds are to be rabbetted. This can be done either at the mill or at the job.

Learn in School



• INGENIOUS UTILIZATION OF ODD SPACES

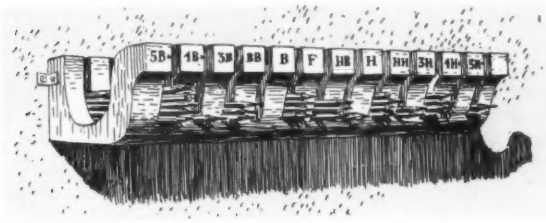
By Ernest O. Brostrom, architect
Kansas City, Mo.

IN planning a modernization job we found the client a most ingenious deviser of space utilization. One of these odd space contrivances is illustrated in the accompanying drawing.

The client had employed the areas under the roofs, where there was not sufficient head room for ordinary closet doors, by arranging very interesting combinations of drawers.

In her bedroom, the top drawer was made out of a conductor pipe opened up, with wood ends, and with soldered-in partitions. This made a convenient place for buttons and pins. Not having adequate book shelves she designed a triangular drawer for books. Below was a shoe drawer equipped with heel cleats. Below this was an oblong drawer of more commonplace form.

These drawers were made up with galvanized iron bottoms bent into the proper form. The edges were rolled and arranged to slide between pairs of rollers which made the operation easy and kept the drawer level when fully drawn. This had been contrived by a tinner under the lady's instructions.



• A HANDY PLACE TO KEEP PENCILS

By Fred M. Guilford, architect
Hartford, Connecticut

A SECTION of 6-inch stock gutter with slots cut to the bottom of the trough provides an excellent place for keeping pencils of various grades. The vertical face at the top of the profile makes a convenient place for marking the grade of the pencils, and the overhang affords some protection to the points. Racks like this placed at intervals on the walls around the drafting room help keep the boards free from an accumulation of pencils.

• GASOLINE AS AN ERASER

By Charles F. Dean, architect
Sacramento, Calif.

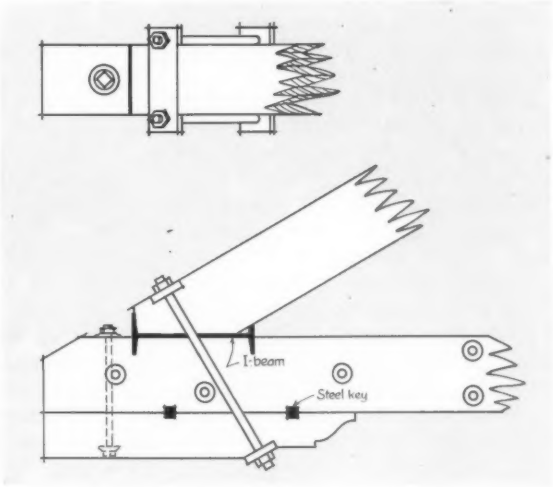
ORDINARY gasoline may be used to erase marks made by a china marking (grease) pencil. A bottle of about 16 oz. capacity and a stiff, No. 10 red sable brush is all you need besides the gasoline—aviation gasoline preferred.

When Mr. and Mrs. Client appear, they look over the neatly prepared sketches. "These are just wonderful. But . . . ."

"Why that's all right," says Mr. Architect, as he reaches for the bottle of gasoline and with the tip of the brush the lines are easily removed.

The psychological effect is gratifying to all—first, seeing how quickly it is done, and second, the client feels that he had a part in planning the building.

Another important advantage—the architect, when developing sketches, can make changes much more rapidly than by the old erasing method or by working sketch over sketch.



• KNEE-JOINT FOR A WOOD TRUSS

By Stanley T. Shaw, architect
Tacoma, Washington

DOING away with the necessity for a special casting or forging to transfer stresses from top to bottom cord of a wood truss, the design shown in the accompanying sketch has been successfully used in this office. An I-beam of proper section is selected, cut to the width of the truss members, and the flanges clipped to the depth required for bearing as shown. Placing the tie-bolts on each side avoids cutting away any wood.

XUM

A New Small House Clinic

Designs at Cost for the Man Who Wants a House of Not More than 1300 Square Feet

BY GEORGE D. RIDDLE
Architect, Long Beach, California

THE Architectural Club of Long Beach recently organized "The Small Home Service Bureau" to (1) educate the public to an appreciation of good architecture, (2) establish good will toward the profession, (3) improve architectural standards in Long Beach, and (4) provide work for unemployed draftsmen. A committee was appointed to work out the details for rendering a complete architectural service for small houses of a limited area.

We faced four major problems:

(1) Organization for management with minimum time required for architects.

(2) Arrangement of nominal fees without price "kick-back."

(3) Obtaining public response to the service.

(4) Obtaining support for the movement.

It was decided that best results could be obtained with least demand on our time, by appointment of a managing board of six directors selected by the president, all members of the board to serve without compensation, and the board to be divided into committees to work out details of office procedure, specifications, drafting standards, and so forth. Each member will serve consecutive terms of two months as Chairman of the Board and Managing Architect. During his term as manager the architect devotes only two hours daily to the business of the bureau. It was believed that this method of organization while requiring little of the architect's time, would foster the spirit of competition between them, each striving to do his best, and insure good architecture as a result of their efforts.

The number of architects in a community is usually governed by the size of the city and building activity. Small residential construction is usually proportionate with general building activity. Considering this fact, the demand of the bureau probably will never exceed the proportionate time demands for which we are organized. If demand on the manager's time should become too great, we can increase the board membership in multiples of six; and by additional members serving as assistant managers which will provide a flexible means of supplying "service" according to demand.

To avoid incurring financial obligations through operation of the bureau, it was deemed advisable to handle all drafting in our own offices, which could be done without increase of overhead. This helped solve the problem of keeping the fees low but it raised the question of a central office for consultation, and an address to be used in advertising. Many people regard an architect as a luxury to be enjoyed by the person erecting a large house or commercial enterprise and are therefore wary of him. For this reason we decided to find a "neutral" office that no one need fear and the Chamber of Commerce was asked to donate desk space, which they have done.

All drafting is to be done by unemployed draftsmen residing in the City of Long Beach. This will not only help alleviate unemployment, but also will provide an avenue to secure publicity and support for the bureau.

MANY draftsmen, under stress of recent conditions, have been forced to design small house work *under the direction of contractors,* as a means of livelihood. This condition leads to formation of partly-trained organizations in competition with architectural offices. If we can keep the draftsmen employed, we have solved one problem and if we can control the quality of their work, we have solved another.

The human factor—variation in efficiency—made it impossible to employ draftsmen on an hourly basis, so a fixed sum according to the area of the job was adopted. It was reasonable to assume that a four-room house of eight hundred square feet area would require less drafting time, proportionate to area, than a six-room house of thirteen hundred square feet, while the cost of supplies, blueprints, and typing of specifications would remain approximately the same for both jobs.

The cost of blueprints, specifications and supplies was estimated at ten dollars for the average job to which was added the sum of ten dollars for an "educational fund" to be used in furthering the aims of the bureau. To the total of twenty dollars we added a sum determined by estimating the drafting cost, for hypothetical houses of varying areas, at the rate of one dollar per hour. By dividing the totals by the building area, we found an average of four cents per square foot which, together with an arbitrary figure of two cents per square foot for porches, garages, and so forth was adopted as the basis of fee for three sets of blueprints and specifications. Additional "instruments of service" will be provided at cost. This means that any person desiring to build a house of one thousand square feet area will receive free consultation on his individual problem and can obtain the required "instruments of service" for a house, especially designed for his lot, for the sum of

VERTISEMENTS

Press-Telegram

AND RESUMES OF INDUSTRY

ONE 690-66 PUBLISHED EVENINGS AND SUNDAY MORNINGS LONG BEACH, CAL., SUNDAY, MARCH 20, 1932 50 Pages—Section C SUNDAY EDITION—FIVE CENTS

Architects Encourage better Small Homes

ARCHITECTS AID SMALL HOME OWNERS

Service Bureau Established by Club at Chamber of Commerce.

PLANS FURNISHED AT ACTUAL COST

Designs Are Distinctive; Object Is to Eliminate "Jerry Builder."

Furnishing the best architecture for the small home at actual cost is the task undertaken by the Long Beach Architectural Club through its newly created Small Home Service Bureau, recently established at the Chamber of Commerce.

Certified architects, giving their time free for consultation and advice, are available two hours daily. Specifications that insure the best of workmanship are furnished and unemployed draftsmen draw plans under direct supervision of the ar-

forty dollars. We had a talking point but how could we advertise it without a "price kickback" in our private practice? This we handled by stating that the service was available to any person desiring to build a house of less than thirteen hundred square feet floor area "at approximate cost," stressing the fact that the architect received no compensation.

More "sales" are necessary to establish nation-wide good will toward the profession. Personal contact is absolutely necessary to close a sale of professional services. The "Bureau" is only a "leader" in an extensive sales campaign; a means of creating personal contact with a large number of prospective builders. When a client comes to the bureau to buy plans, the architect is given an opportunity to explain his services. He stresses the importance of complete service and discusses all the pitfalls that await the owner who builds without professional guidance. The fact that the nominal fee the client pays compensates in no way for the services rendered by the clinic, is firmly impressed upon him as well as the fact that in addition to devoting his time in consultation, the architect is absorbing in his private business such expenses as drafting-room rent, heat, light and telephone.

In accepting the service of the Bureau, the client is not obligated for supervision of construction, but he is told about the relation of supervision to the security of his investment. Supervision is provided by the architect at a minimum fee of two per cent of the cost of the work. When the house is completed, the client will not feel that "plans" were bought cheap, but that he obtained an invaluable "service." These clients will go far to build up good will, without which no business or profession can long exist.

HOW THE PLAN WORKS:

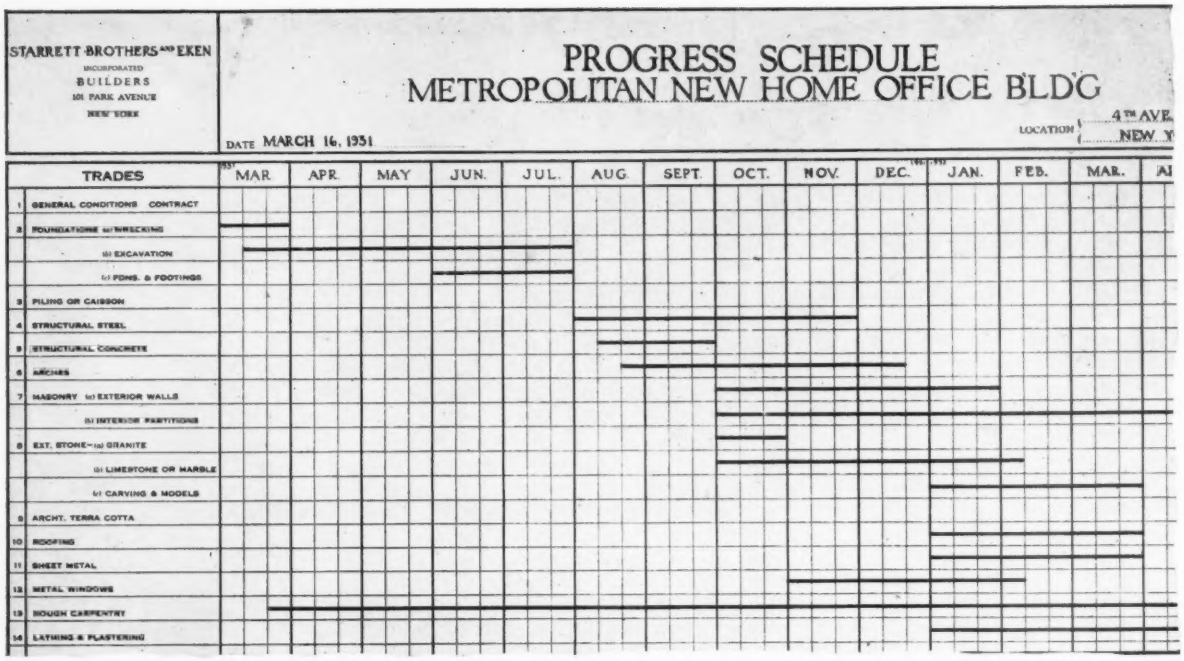
1. . Individual service is offered the client instead of "stock plans"
2. . Office located in Chamber of Commerce Building
3. . Architects give their services free
4. . Plans for each house are drawn by unemployed draftsmen
5. . Drafting is handled in architects' offices to eliminate overhead
6. . Owner pays the "clinic" a nominal fee based on area of house
7. . Supervision charge, two per cent
8. . Part of fees go to "public education" fund, balance to draftsmen

Unemployment is a problem of grave importance throughout the country. Newspapers and civic organizations are eager to support any movement to relieve this condition. The Bureau has had front-page news items on several occasions, twice being featured in the building development section. The publicity the Bureau has already received could not be purchased for a thousand dollars. The Chamber of Commerce and the Realty Board were asked for support on the grounds of public welfare, civic beautification and stabilization of realty values; the Building and Loan asociations on stabilization of residential loan values and increasing the security of investment; and the Builders Exchange on the general improvement of conditions in the building industry. Inasmuch as moral support is all we asked, the movement has been heartily endorsed by every organization. We must prove the success of our theory before asking any financial assistance.

The educational fund will be used for furtherance of public school competitions in matters pertaining to good architecture and to finance the publication of literature on the "service of the Bureau," "value of an architect's services," "value of good architecture to the community," "good architecture defined" and kindred subjects which it is planned to distribute through members of the Realty Board, Chamber of Commerce and Building and Loan Associations. These pamphlets published by the Bureau and endorsed by local financial institutions and civic organizations will carry weight.

At times like the present many architects probably feel that no house is too small for their office. However, when times are good and boards full, what happens? Many architects do the profession immeasurable damage by refusing to handle *(Continued on page 88)*

XUM



SCHEDULE visualizes when the trades are to start and finish their work. Frequent conferences between architects and builders are held to work out construction problems which might affect and delay the schedule

How the Architect Can Help Build Buildings Faster

By GEORGE WHEAT

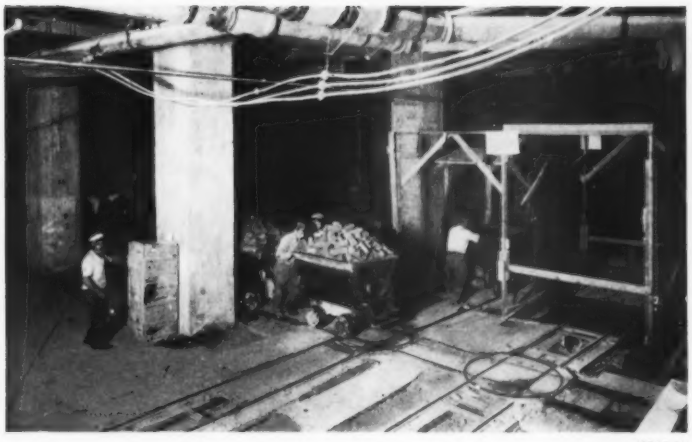
LARGE PROJECTS completed in late 1930 and early 1931 were done in about twenty per cent shorter construction periods than would have been required had these been done four or five years earlier. This shortening of time and the urge back of it is of interest to all architects and their work does play a very definite part in this inexorable advance.

Raymond Hood recently said: "Today, in this machine age, the architect in designing a building is more like a Henry Ford than he is like a Michelangelo." These words carry a clear thought and message. But it need not be a disturbing one. Michelangelo had a busy time of it and if historians and biographers are correct, even Michelangelo had a heavy responsibility placed on him in "seeing that the job got done." Recently it was stated by one enthusiast that Michelangelo one day climbed down from his artist's scaffold and invented the wheel barrow. Whether this be true or not it is representative of the responsibilities placed upon him and his efforts to secure completion of the works placed in his charge.

The profession of architecture has advanced under the leadership and the inspiration of those who could and did organize and drive. It so advances today. The architect may safely be compared with the commander-in-chief of an army. Comparable with General Pershing's "Big Job," the architect and his staff alone have the master grasp of the entire project, for they have created and therefore know the objective and its details. Their profession and economic interests just as definitely carry forward through all the phases of objective, plan, strategy, service of supply, and finally the execution of plan and attainment of objective as do that of the commander-in-chief of an army.

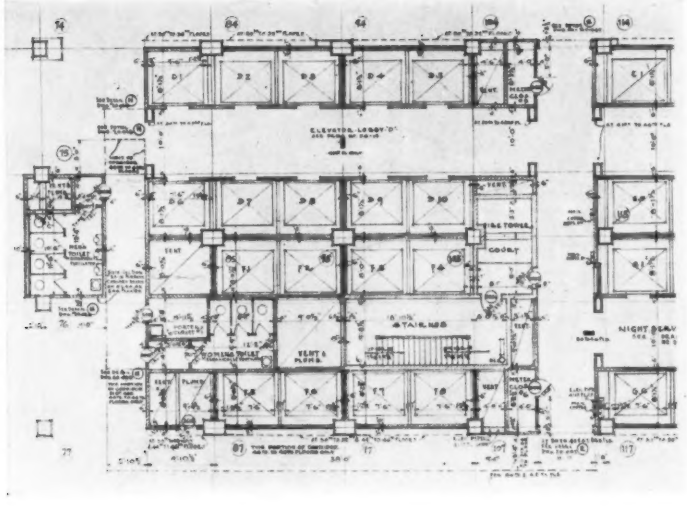
The first big job is to visualize the objective and then to translate to the human factors their own particular part of the job. The drafting room is the center for visualization and the specification room is the center for information on materials of supply.

For visualizing to others we must have absolutely clear and unmistakably intelligible blue prints. These *must* be good, for they are the principal contact medium. Are they always thus? It must be admitted that often these blue prints are printed from tracing paper with faint pencil lines; false economy even goes so far at times as to permit use of poor blue print paper that fades. Now that there is so much use of pencil drawings for negatives, we must and can have vigorous, clear work with pencils of the right grade in the hands of draftsmen who have the knack of making drawings that blue print well.



MOLLOY

FACTORS IN FASTER BUILDING



BROWNING

Top left: Model made of blueprints pasted on cardboard helped mechanics to better understand their work on the Goelet Building, New York. Top right: New ways to handle materials were developed on the Empire State Building. Left bottom: Easy-to-read drawings help to eliminate mistakes. Elevator plan, Empire State Building. Bottom right: Spandrels were so detailed on the Empire State Building as to cut many days from schedule

The scales used are of prime interest. Scales too small to allow full and complete information, thus forcing the use of small and often careless lettering, should not be used at all for working drawings. When drawings have reached the estimating stage of the job they should be above criticism.

The use of unusual scales is objectionable. A three-eighths or a one-half-inch scale may easily lead to later misunderstandings. Misunderstandings are always costly in time and money.

Our large buildings demand free development of the master or "assembly" drawing with additional drawings increased in scale and again increased in scale in successive stages until the last user of the blueprints can have his own part of the job presented clearly and intelligibly. Contractors' organizations tell me that there is a great difference in the amount of work that they must do in their own drafting rooms as between the plans of one architect and another.

Sureness and speed in visualizing the project to others can be aided by the use of working models. It may well be borne in mind that, even among the men who direct the construction industry and among those holding responsible positions, scarcely (*Continued on page* 90)

XUM

. . As It Looks

A Needed Activity

ON page 10 of this issue, there is presented a plan for modernizing exhibitions that can be held advantageously in any community. This plan is one that might well be developed, duplicated as many times as necessary, and sent out as a traveling exhibition under the direction of the American Institute of Architects. It is an idea that could well have been undertaken, among others, by the Committee on Special Activities, proposed at the 65th Convention of the American Institute of Architects in Washington on April 28, 1932. Unfortunately, this committee will not be appointed, although it is apparently one that is sorely needed to handle activities that are not now being carried on by the Committee on Public Information.

The Irony of Fate

THE Cunard pier at Thirteenth Street, New York, was recently destroyed by fire. Lieutenant Colonel Ralph A. Kluge, architect and engineer, was a much interested observer who watched the fire wrecking the structure he had designed about thirty years ago. A fire hose broke loose from a hydrant, its metal coupling striking Colonel Kluge on the back of the head. He was removed to a hospital where he died later of a fractured skull. He was associated with the firm of Cross & Cross, architects.

Architects' Hobbies

AN exhibition of architects' hobbies was recently held in New York for the benefit of the fund for Unemployed Architects and Draftsmen. It was interesting to learn what architects do with their space time. Some fence; others go in for archery; wood carving; collecting pigs made of metal, glass, wood and clay, and butterflys and moths; duck decoys and live pigeons. Architects' hobbies not included in this exhibition might be mentioned such as fishing, raising fine cattle, designing stage scenery, raising fighting cocks, juggling and gymnastics. One architect admits he likes his bed.

It is a good thing to have a hobby that takes the mind away from the work at which one makes a living. As a class, architects tend to live too close to their jobs. Relaxation, doing something else, is good for the mind, body and spirit.

Honored Dead

IT is quite fitting that those whose names have won a place in the history of architecture should be honored after their death by those who have benefited from their works. And so the formation of a new committee by the Philadelphia Chapter, A. I. A., is worthy of more than passing note. This committee has as its purpose the honoring of the memory of distinguished architects through the placing of a token of respect on their graves each Memorial Day. This year, under the chairmanship of D. Knickerbacker Boyd, George I. Lovatt, John H. Rankin and John P. B. Sinkler visited the graves of five architects whose careers had meant much not only to the profession but also to the profession nationally: Theophilus P. Chandler, Frank Miles Day, Milton Bennett Medary, Edgar V. Seeler and James H. Windrim. This remembrance of noted architects originated with the Washington, D. C., Chapter and is one to be commended to every architectural society.

Why False Chimneys?

A SUBSCRIBER calls attention to the large number of false chimneys illustrated in the plate section of the June issue of AMERICAN ARCHITECT. This was a curious coincidence, for an unintentional accumulation of examples of false chimneys would probably not occur more than once in twenty years. But does the fact that four buildings having a total of five false chimneys, all published in one issue of a magazine, indicate that architects are falling by the wayside in furthering fake construction for the sake of effect? It costs something to build even a false chimney and as the subscriber asks, is it good architecture?

Well "Oiled" Conventions

CONVENTIONS of the American Institute of Architects are sometimes referred to as being well "oiled"—meaning that they are possibly run too smoothly. Expressed with an implication of adverse criticism, it is as a matter of fact something of a compliment. It must be remembered that the Board of Directors have discussed the many problems confronting the Institute and made possible the making of a prompt decision by the convention delegates; and that a large volume of work must be accomplished in a comparatively short time. The fact that the Institute conventions are well "oiled" is a complimentary tribute to the Board of Directors and the executive ability of the Institute's executive-secretary, Edward C. Kemper. Perhaps those who object to a well "oiled" convention should attend one that is not so well planned in advance.

Warning to Architects

A NEW way to get money from architects has been inaugurated. The idea is that the "buying corporation" acts as "buying advisor" to a large number of stores and that it will recommend certain architects to these stores so that those thinking of buying or remodeling will get in touch with the recommended architects. The recommendation is to be in the form of advertising copy approved by the architects and sent by the "buying corporation" to the stores. The catch is that several hundred other "approved recommendations" of various equipment and services are sent in the same envelope. It would probably be nigh to impossible for any recipient to find time to read even a fraction of the "recommendations."

XUM

to the Editors . .

Have You Tried This Plan?

IN the June issue of AMERICAN ARCHITECT was published an article called, "A Plan to Create New Business for the Architect." This plan is intended to make the public regard the architect as the one man with whom to confer on any matters relative to building, be it a new roof, a new bathroom, or a new house. The editors of AMERICAN ARCHITECT would like to hear from any architect who has tried out this plan or any similar plan of getting such business on a fee basis.

More Votes in Referendum

ONE hundred and ninety votes in the referendum on the Architects' Small House Service Bureau were received too late to be included in the tabulation published on page 19 of the June issue of AMERICAN ARCHITECT. Of these 190 votes, 40 A.I.A. members were against continued endorsement by the Institute (making a total of 699 A. I. A. members against) and 16 for continued endorsement (making a total of 283 A. I. A. members for). Of those not members of the Institute, 109 of the 190 new votes were against continued endorsement (making a total of 1,455 non-Institute members against) and 25 for continued endorsement (making a total of 265 non-Institute members for). The final complete total of all architects voting against continued endorsement of the Bureau by the Institute was 2,154 compared with 548 voting for continued endorsement.

No Sugar In Some Mortars

AN editorial in the May issue of AMERICAN ARCHITECT commented upon a statement made by the Mellon Institute of Industrial Research to the effect that the strength of mortar is increased by the addition of sugar in the gauging water. The Portland Cement Association has called attention to the fact that newspaper reports made it apparent that sugar would increase the strength of any mortar, whereas the report was based upon tests of lime mortar briquettes, and states that the addition of sugar to Portland Cement mortar is harmful and should therefore not be attempted. The authors of the report concur in this opinion.

Good Work, Mr. Greenleaf

CRITICISM was made in the January 1932 issue of AMERICAN ARCHITECT of a leaflet prepared by Walter J. Greenleaf on "Architecture as a Career" and issued by the United States Department of the Interior. The leaflet, written as an aid to guide young men and women in the selection of their life work, presented an erroneous and unfortunate perspective of the practice of architecture. Since the criticism was made, the leaflet has been entirely rewritten and the revised edition is now available for distribution. The paragraphs which were adversely criticized have been eliminated and the new edition is an excellent and well condensed presentation of the essentials of architectural practice. Mr. Greenleaf's eminent fairness, spirit of cooperation and desire to make the leaflet of utmost value to its readers deserves the commendation of architects. Mr. Greenleaf is to be congratulated upon a job well done.

Tomorrow's Hospitals

WHAT will the decoration of the hospital of the future be like? That is a question which may perchance be answered by an operating room at Barnes Hospital, St. Louis. This room has been walled with fantastic scenes to distract the attention of patients undergoing operations performed with local anesthetics—rabbits, gnomes, pine trees, cupids, penguins, the Fairyland characters and denizens of the forest. The ceiling is covered with mermaids and deep sea creatures swimming in painted waves. Miss Gisella Loeffler spent six months in painting the room. Dr. Burlingham, superintendent of the hospital, states that the therapeutic value of art in this operating room has already been demonstrated.

Sad Commentary On Taste

IN the May issue of "Woman's Home Companion" Bruce Barton quotes the president of a large insurance company as saying: " . . . we seldom take a loan on architects' homes because our experience has been that, although they are beautiful, each one is built to suit the architect's own tastes and so is not suited to another family." The natural interpretation of this statement is that it refers to houses that architects build for themselves. No house of this kind can be recalled that is so individualistic that it would not meet the requirements of a family of similar size and condition in life, culture and refinement. The attitude of this president or those responsible for passing upon the loans made by his company is a serious reflection—not upon architects—but upon the taste and ideas of what constitutes good livable houses for a large number of American citizens. It is good evidence of the need of public education in the appreciation of architecture, which includes good planning as well as beauty.

The statement if read hastily may easily be interpreted by the layman as referring to houses designed by architects. And if so interpreted, it might influence a few people to avoid architects. It is a sad commentary on present day methods of financing buildings. Do financiers really prefer to loan other people's money on construction of unknown quality and plans made by amateur designers? Few buildings are built—whether or not designed by architects—that do not require some financial assistance. If loans were refused on buildings designed by architects, the profession would soon cease to exist. And then what would America look like? One shudders to think.

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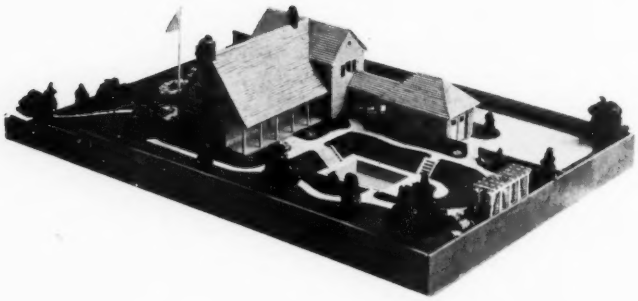
WHAT ARCHITECTS



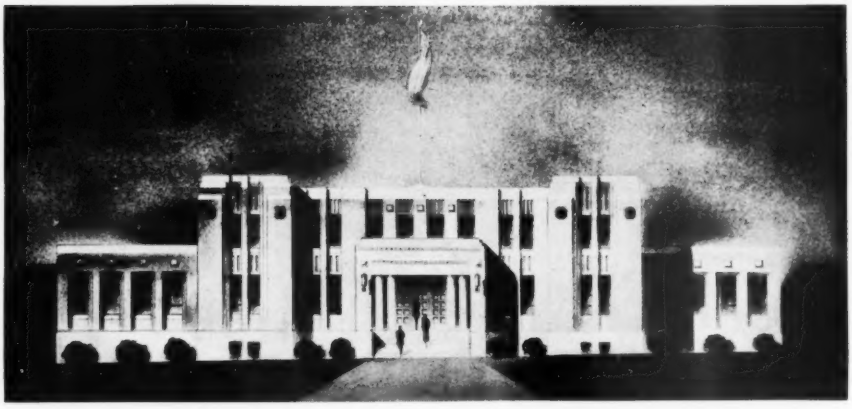
Awards for Modernized Houses

Jersey Architects Help Blind

Federal Building Investigated

A MODEL FOR THE BLIND

The New Jersey Chapter, A. I. A., having offered to cooperate with schools for the blind, was recently asked to provide a model for study. Realizing that the average model is too fragile to stand handling, Charles H. Bauer, chairman of the Chapter's Educational Committee, prepared a design from which Jacob Knecht made a model, illustrated above, that would stand handling by the blind



Charcoal rendering of prize winning design for armory, West Haven, Conn. Fletcher-Thompson, Inc., architects and engineers

AWARDS to owners for houses modernized during 1932 will be made in April next year by the Philadelphia Committee, Better Homes in America. Two medals and certificates will be given for houses modernized in accordance with the program developed by the committee. These awards will be in addition to the awards made for the two best houses costing less than $6,000 including land, and a certificate for the two best examples of landscaping of homes costing not more than $10,000. The chairman of the committee is D. Knickerbacker Boyd, c/o Philadelphia Housing Association, 1600 Walnut Street, Philadelphia.

THE Huddleston plan to stop shopping of bids has been adopted by the Boston Building Congress. The main features of the plan, developed by Professor Eric T. Huddleston of the University of New Hampshire, are that each bid shall include all the work specified; be subdivided to show the amount covering the work of the general contractor, including all overhead and profit and the total of all sub-bids as listed; and that each bidder shall file a copy of his bid simultaneously with the architect.

FAILURE of the Federal construction program to relieve unemployment is being investigated by the American Engineering Council. Committees of the Council have been organized to cooperate with the public works section of the President's Organization on Unemployment Relief in the making of a survey of 1932 public works projects. The American Institute of Architects and the Associated General Contractors of America are also participating. The Council is convinced that public works never can be made as effective a factor as they might be in relieving unemployment until there is established an administration of public works or its equivalent.

ROCKEFELLER CENTER, better known as Radio City, has appointed Edward Trumbull as color director for the art program. This appointment was considered necessary because of the size of the job. Forty murals, fifty sets of sculpture and displays of other forms of decoration will enter the finished buildings.

A SURVEY of zoning laws and ordinances adopted during 1931 has been compiled by Norman L. Knauss, Division of Building and Housing, U. S. Bureau of Standards, Washington, D. C.

MINISTERS should be interested in city planning according to Thomas Adams, consultant to the Regional Plan Association, New York. He says that "one definite purpose of the Church should be to develop a reverence for the city as a physical expression

XUM

ARE TALKING ABOUT

Radio City Has Color Director

Boston Plans To Stop Bid Shopping

What Makes a Building Rentable?

WINNING DESIGN for the new building of the Royal Institute of British Architects. Grey Wornum, architect

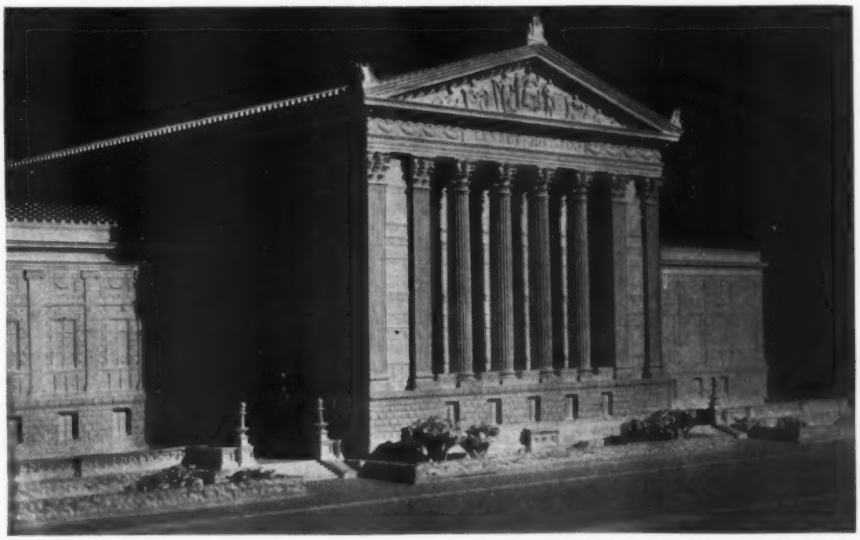
of social order; to promote the natural love of the citizen for beautiful things that will engender love for the city. With love of the city will come desire to improve it, to devote oneself to its needs, to be less selfish and more altruistic. Through its spiritual power and ethical leadership the Church can help to mould a better city by means of a physical plan."

SEARS, ROEBUCK give their major cause for rejection of mortgage loans as undesirability of site.

W. SYDNEY WAGNER, a member of the firm of Bottomley, Wagner & White, New York, died recently. He had been a student at the Ecole des Beaux Arts, Paris, and was a winner of the Paris Prize. Among the buildings which he designed are the Hotel Roosevelt, New York, and Statler hotels in Boston, Buffalo, St. Louis, Detroit and Cleveland.

AN International Exhibit of Architectural Drawings is planned by the City of Asbury Park, New Jersey, which wishes to hear from architects as regards their contributing drawings in this permanent exhibition. The exhibition will be placed in the new Hall of Nations, a section of which will serve as a museum and art gallery of peace.

DWIGHT JAMES BAUM is made the subject of an article in the New York Herald-Tribune Magazine Section for May 22. The subtitle reads, "Out of a job, Dwight James Baum Went Up to Riverdale and Built Himself a House. That Was Back in 1914; Now Half the Homes in That Beauty (*Continued on page 92*)



DREYER

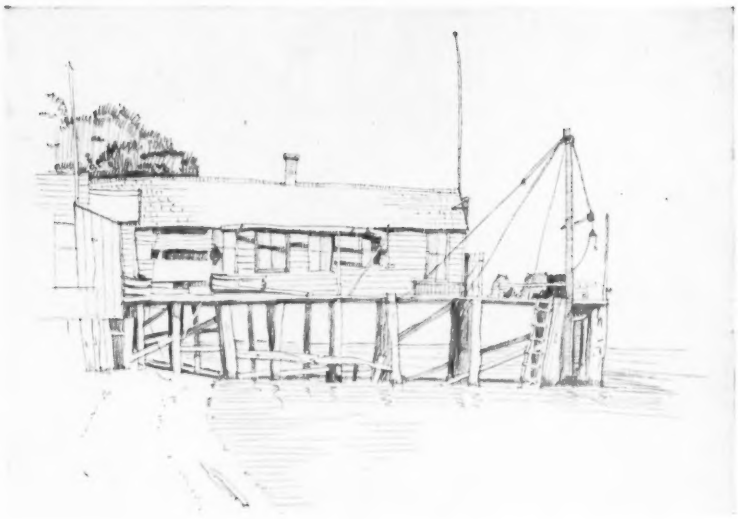
MODEL FOR NEW SUPREME COURT BUILDING

Detail of marble Corinthian columns and pediment of the United States Supreme Court building now under construction at Washington, D. C. It will face the United States Capitol building on the east. To be built of white marble. Cost, $8,000,000. Cass Gilbert, architect. Photograph courtesy George A. Fuller Company

XUM

PROVINCETOWN, every now and then, juts itself out into the sea

The church steeple could be seen for miles by Provincetown fisher folk



Seaports of Old

By BURTON

Sketches by

Swishing tides were lullabys to those who hugged the shore line of Cape Cod's tip

ONE afternoon in June, 1787, the "Grand Turk," Capt. Ebenezer West, Master, with her holds piled high with the rich spoil of the Orient, dropped anchor in Salem harbor. For the first time an American trader had rounded Cape Horn with a cargo from the Far East; a glamorous chapter in American history was opened. The infant nation was taking to the water.

This seafaring tradition in New England began long before the Revolution. Along the coast, sheltered harbors abounded, good oak timber was standing on the shores. Soon the mouth of every creek was ringing to the sound of the shipbuilder's mallet. It took only a few generations to evolve iron men to sail wooden ships into far waters.

The early shipping was largely coastal or with England. But with the close of the Revolution shipowners, emboldened by their naval victories, sought wider fields; East Indian and China trades boomed. The apogee was reached in the early years of the nineteenth century, when Yankee skippers became as familiar with the landfalls of Zanzibar and Valparaiso as with their own New England; when canny merchants sent out mixed cargoes of Medford rum and pine boards which Canton gladly exchanged for tea and satins; and when American topsails were sighted on the seven seas.

All this had an important effect on architecture. Wealth flowed into the seaport towns, and a new race of merchant princes — a moneyed aristocracy — arose. Shipping brought them wealth and leisure; their discrimination was enhanced by intimate contact with the older civilizations of Europe and the Orient. It may be said, therefore, that it is to the sea that we owe the architectural glories of Pleasant Street in Portsmouth, and Washington Square in Salem.

Strangely enough, the decline of these New England ports began during the richest period of American shipping—the clipper era. A need for speedier passages doomed the broad-beamed Indiaman; her place was taken by the skysail clipper, the fastest and most beautiful ship ever driven by the winds. And the deeper water, the more ample dock and railroad facilities of Boston and New York gradually drew the shipping from the

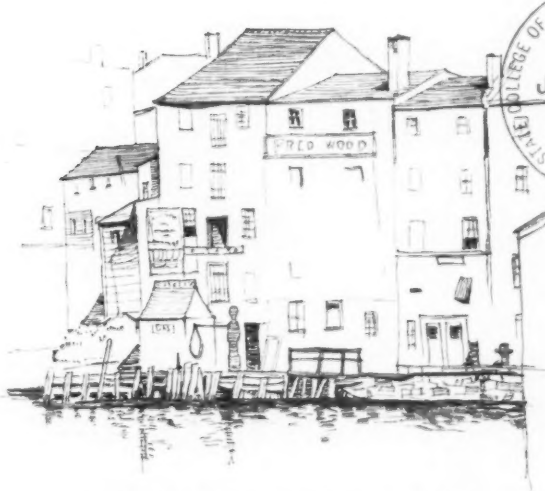
PORTSMOUTH,
like other fishing villages,
had need for tombstones

Why not leave a passageway, when Portsmouth neighbors were so friendly?

New England

A. BUGBEE
the author

STATE COLLEGE OF AGRICULTURE AND APPLIED SCIENCE
LIBRARY
JUL 11 1932
MANHATTAN
MANSAS



Pretentious structures which seemed like towering skyscrapers to Portsmouth men

smaller ports. The Civil War and the age of steam completed their downfall.

Let me recommend these old ports to the architect. The old houses of New England, the towns themselves, of course, are preeminent treasure-houses of colonial antiques, and the wharves as delightful recuperating bases. After soaking up architecture to completion, one can always seek out the nearest waterfront and there spend a lazy afternoon, marveling at the line and texture of the old shacks, talking with lobstermen, and watching the gulls. There is an air of gentle decay over these scenes of a once lively commerce, and always the fresh, tangy smell of the sea.

My pilgrimage up the coast began at Provincetown, that unique settlement at the tip of Cape Cod—a melange of the New England village tinged with a lusty flavor of fish. Two miles long, perhaps two hundred yards wide, the town is a delightful jumble of fishing shacks, wharves and one-story shingle cottages elbowing each other along the narrow lane that is Commercial Street.

Provincetown has a history, too, for here on November 11, 1620, the Pilgrim Fathers first set foot on American soil. Here, they drew up the famous Mayflower Compact before sailing on to Plymouth Rock. Provincetown is proud of these things, and has recorded her pride in a lofty and very ugly memorial—a sort of attenuated Palazzo Vecchio tower.

Provincetown has yielded herself completely to exploitation, takes it as a matter of course, and is tolerant of the frenzied artist who wears his soul unbuttoned and leaves smears of spectrum yellow over the wharves. In spite of the hokum and quaintness about town, the Portygee fishermen still bring in catches of real cod and mackerel; and one can always escape from the barkers and scarlet pajamas of Commercial Street to the far end of a rickety pier and there breathe in the authentic, satisfying aroma of fish and salt water.

Provincetown never was an important seaport like her neighbors north of Boston. Her isolated location on the far end of the Cape in an unfruitful countryside saw to that. So she has resigned herself to the two complementary businesses of fishing and tourists. The fish business, with its resulting (*Continued on page* 80)

XUM

Controlling Costs

A Simple Method of Making Rapid Preliminary Quantity Estimates

BY TIRRELL J. FERRENZ, A.I.A.
Frank A. Chase and Company, Inc., Architects and Engineers, Chicago

ONE of the effective tools in the equipment of an architect is the ability to judge quickly and accurately the cost of proposed structures. Clients invariably demand some preliminary information as to cost, and it is rarely possible to sidestep a commitment. When faced with this emergency, cubic foot and similar unit costs are valuable, but they are also highly dangerous unless backed by good judgment and a collection of classified data.

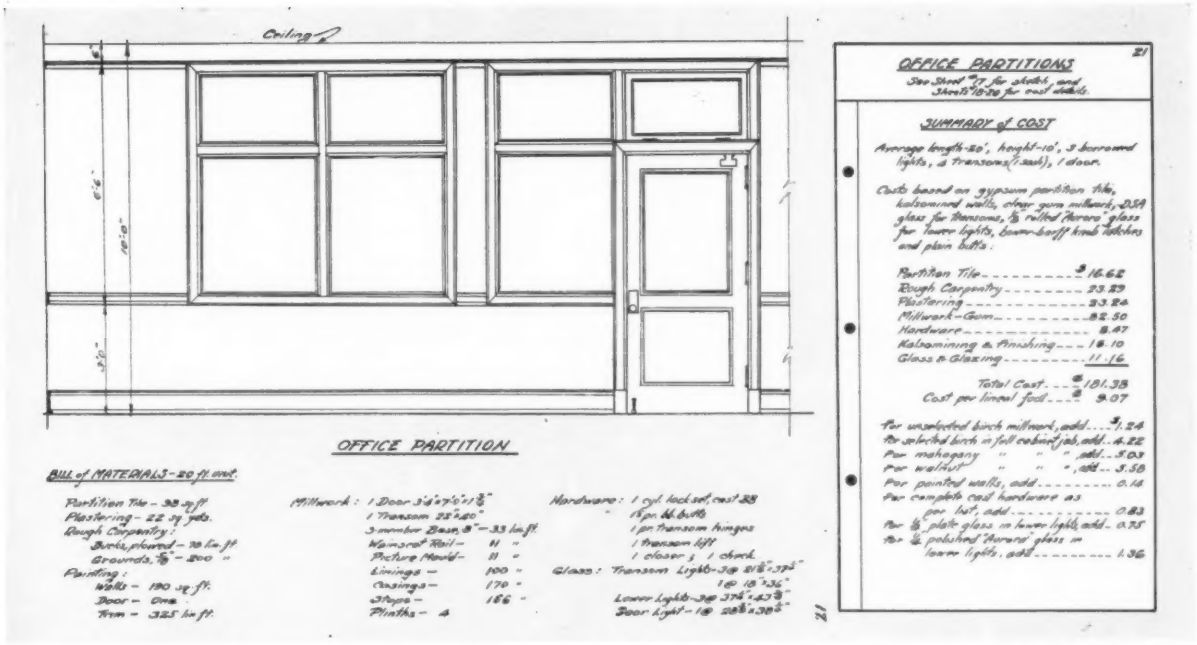
Success in estimating is within the reach of any architect who is willing to devote a little time to the collection of such data. In the February, 1931, issue of AMERICAN ARCHITECT, the author pointed out how cost data can be collected, classified and utilized to advantage in the development of quick judgment units.

These units are not only effective in answering preliminary demands for cost information before drawings have been prepared, but they are also useful in establishing limits of probable expenditure. They are in no sense intended to replace more accurate estimates which are obtainable by proper pricing of quantities just as soon as preliminary drawings have become available.

Some artistic souls cannot approach the making and pricing of detailed computations of quantities without a shudder of horror, while others make no pretenses but call upon friendly contractors to donate their services in this emergency. The result is frequently misleading as the contractor assumes no responsibility and is chiefly concerned with the opportunity of pleasing the architect and impressing him with his ability to build with unusual economy.

Below is described a simple scheme which permits every architect to rely with unfailing confidence on his own efforts. It eliminates all drudgery and provides a method whereby preliminary quantity estimates may be made with extreme rapidity and reasonable accuracy by anyone possessing fair judgment. Briefly, the plan is this:

The major components of typical structures such as floors, walls, roofs, partitions, and similar items, are analyzed for various conditions and priced accordingly. The unit prices are based on experience tables developed


Ceiling
OFFICE PARTITION
BILL of MATERIALS - 20 ft. unit.
Partition Tile - 38 sq ft
Plastering - 22 sq yds.
Rough Carpentry:
Studs, plowed - 70 lin ft
Grounds, ⅞" - 200 "
Painting:
Walls - 190 sq ft.
Door - One
Trim - 325 lin ft.
Millwork: 1 Door 3'4"x7'0"x1⅜"
1 Transom 25"x40"
3 member Beam 8" - 33 lin ft.
Mantel Shelf - 11 "
Picture Mould - 11 "
Linings - 100 "
Casings - 170 "
Stops - 186 "
Plinths - 4
Hardware: 1 cyl. lock set, cast 28
1 pr. 4½ butts
1 pr. transom hinges
1 transom lift
1 closer & 1 check
Glass: Transom Lights - 3@ 21⅝"x37½"
1@ 19"x36"
Lower Lights - 3@ 37½"x43⅜"
Door Light - 1@ 28⅝"x36⅝"
21
OFFICE PARTITIONS
See Sheet "7" for sketch, and Sheets "8" to "20" for cost details.
SUMMARY of COST
Average length - 20', height - 10', 3 borrowed lights, 3 transoms (1 sash), 1 door.
Costs based on gypsum partition tile, balsamined walls, clear gum millwork, 2 DSA glass for transoms, ⅛ rolled "Arora" glass for lower lights, bronze-buff knob latches and plain butts.
Partition Tile - $16.62
Rough Carpentry - 23.29
Plastering - 33.24
Millwork - Gum - 82.50
Hardware - 8.47
Balsamining & Finishing - 18.10
Glass & Glazing - 11.16
Total Cost - $181.38
Cost per lineal foot - $ 9.07
For unselected birch millwork, add - $1.24
For selected birch in full cabinet job, add - 4.22
For mahogany " " " add - 5.03
For walnut " " " add - 3.58
For painted walls, add - 0.18
For complete cast hardware as per list, add - 0.83
For ⅛" plate glass in lower lights, add - 0.75
For ⅛" polished "Arora" glass in lower lights, add - 1.36
21

Analysis of major cost units for finished partitions in office buildings, together with sheet giving cost data

from special studies or with cost data accumulated from previous operations. In making an estimate, it is only necessary to list the quantities of these major elements and apply the proper price unit.

To illustrate the method, we will outline its application to a simple type of building,—say a one-story factory building 100′ x 200′ in size with common brick walls, pivoted steel windows, steel columns and girders, wood roof deck, concrete floor, clay tile partitions for offices and toilet facilities, and a clear ceiling height of fourteen feet.

The walls are considered as a complete major element and as such are composed of sixteen items from bottom to top, viz: excavation for trenches, formwork, concrete foundations, stripping forms, backfilling of foundation walls, removal of excess earth, dampproofing foundation tops, brickwork, window sills, steel windows, grouting windows, glass and glazing, steel lintels and sash angles, sheet metal gutters and downspouts, and painting of all metal work. The cost of such walls, taken from the experience tables, complete from bottom to top is $12.73 per lineal foot. The cost of the enclosing walls of our building therefore will amount to $12.73 times the perimeter of the building.

If one or more walls are laid up with $35 face brick with simple reveals and have a 2 foot high parapet backed with pavers, topped with 8 " thick stone coping and flashed at the roof with No. 22 gauge galvanized counterflashing, the unit cost for such walls, again taken from the experience tables, will be $18.65 per lineal foot.

IN a like manner the floors may be said to consist of removal of top soil, rolling sub-grade, setting grounds and levels, cinder fill, concrete base course, wearing course and curing, and will cost complete 27 cents per square foot. If reinforcing mesh is required in the floor slab, we know from our cost data book that 1½ cents must be added. If surface treatment is desired, add ¼ cent.

The roofing unit is made up of the supporting steelwork, wood joists, wood sheathing and composition covering. It will cost $0.45 per square foot. If the deck is of slow-burning construction, that is, 3" sheathing on heavy joists, the cost will be $0.49 per square foot. A one-inch thick layer of fibre insulation will add 7¾ cents per square foot. Painting the underside of the deck with two coats of mill-white will add 6 cents, and where a suspended metal lath and plaster ceiling is required in the offices, 20 cents per square foot additional should be allowed.

Thus with three simple computations the building is completely enclosed.

These illustrations are sufficiently comprehensive to illustrate the method of attack. The cost of the remaining major elements, including the mechanical work, is carried out in a like manner, making allowance for all special features.

The same method is applicable to a more elaborate or finished type of structure, in which case the number of items will be increased somewhat, although the principle remains the same.

In starting a cost data book it is not necessary that all the basic combined units applicable to a particular type of building be worked out at any given time. The simplest procedure is to select those for early development which can be most frequently used. Then as time goes on and necessity arises, additional combined units can be developed to meet special cases, thus greatly enriching the volume of data available. Each office must work out these units to fit its own particular type of practice. Some will find the cost of a completely equipped bathroom or diet kitchen of value, others an analysis

XUM

SOURCES OF INFORMATION

A. GENERAL:
1. Table of wage rates for 118 principal cities in United States and Canada published each year by the Builders Association of Chicago.
2. Constructographs, published by the "Constructor," monthly magazine of the Associated General Contractors, particularly those graphs showing for each year since 1914 and each month of the current year – a. Cost of construction b. Volume of construction c. Wages and material prices
3. Business indicators, published weekly by the U. S. Department of Commerce, commodity price index, electric power output, corporate bond issues, etc.

B. SPECIFIC:
4. Bids on our own work. As nearly all our jobs are let on a separated basis, each project produces a large volume of information. Similar information is obtained from other architects about their current work and also from contractors regarding work on which they have figured.
5. Salesmen and solicitors. We make it a policy to see as many callers as possible. Instead of this being a drag or a dead loss, we try to turn it to our advantage by obtaining some item of worthwhile cost information. Most of these men are well posted and are desirous of being helpful.
6. Other sources such as technical magazines, trade publications, appraisers, mortgage bankers, realtors, etc.
7. Whenever we visit another city in reference to some project, we call upon one or more prominent contractors, or material dealers and obtain specific data on current prices and local conditions. Out-of-town contractors who visit the office are also helpful.
8. Once or more each year we make a definite detail check of prices of fundamental building materials in our locality. These include cement, sand and gravel, common brick, framing lumber, shingles, composition roofing, metal lath, plaster, insulating board, metal windows, glass and flooring. This gives fresh authentic information on conditions and trends.

METHODS OF RECORDING DATA

C. DATA FROM ACTUAL BIDS & CONTRACTS:

BOOK #1. Basic data sheets, recording the cost of each project broken down into its component parts as completely as possible. The sheets are made up at the completion of each job or whenever data is obtained from outside sources. Summary sheets, showing the unit costs by square foot and cubic foot for all buildings of the same type, such as apartments, banks, churches, etc. Entries are made whenever the basic data sheets are available.

BOOK #2. Detail sheets, giving a summary of all bids or contracts for separate items, such as structural steel, heating, marble, smokestacks, etc. These sheets are made up from data taken from the basic sheets and are posted whenever spare time is available.

D. DATA FROM MISCELLANEOUS SOURCES:

Data sheets, (filed with Book #2) embracing all miscellaneous items of labor and material costs obtained under headings B-5, 6, 7 and 8 above, entered in chronological order under appropriate alphabetical headings. These sheets are so kept that the information at hand is always up to date. Entries are made from time to time as the information is acquired. Old sheets are saved for reference in appraisal or valuation work.

E. SPECIAL STUDIES:

BOOK #3. Data sheets, covering the cost of the major components of buildings as described in the accompanying text. These sheets are either made up to suit particular cases or when spare time is available.

Summary of sources of information and methods of recording data

of bank counters, stone walls, store fronts, and so on.

The illustration at the top of the second page of this article illustrates the detailed composition of major cost units for finished partitions such as are customary in office buildings. An inspection will indicate that there are twenty-six separate items of material in the typical partition. These items, together with the necessary labor, are priced to fit the various types of trim, finish, glass and hardware desired and are then all rolled up neatly into one composite figure, varying from $9.07 to $16.98 per running foot.

All such sketches and the accompanying data sheets are filed in a note book in numerical order with an index sheet in front. We prefer a small book but find that it is often inconvenient to compress some sketches and data sheets to the size desired, consequently a second or letter-sized book is necessary. The information on these larger sheets is summarized, however, for insertion in the smaller book so that a complete record is kept under one cover.

The passage of time casts a blight on cost records like everything else but during normal times it should not be necessary to make complete revisions at more frequent intervals than two or three years. As a matter of fact, it is practically always necessary to make some alteration in the units to take care of special conditions at the site, some peculiarities of construction, or smaller or larger quantities than what might be considered a fair average. These factors, together with current market conditions, are appraised almost automatically after a little practice and the units increased or decreased by such percentage as judgment dictates.

The enormous saving in time and labor by the use of a unit estimating basis is obvious. When applied with some ingenuity and proper judgment of governing conditions, the results are bound to be accurate within reasonable limits.

It is not claimed for this method, however, that it gives anything more than fair approximations, nor that it is in any sense a substitute for the more definite results which are obtainable by detailed quantity surveys. Such surveys are expensive and time-consuming, and are only possible after drawings have been completed. Absolute precision is neither required nor desirable when the drawings themselves have progressed but little beyond the preliminary stage. At such times the method outlined can perform a valuable service in keeping the architect free from the agony of cost entanglements. If this one thing is accomplished, it will go a long way toward leading his faltering footsteps into that elusive paradise where satisfied clients walk hand in hand with fair profits.

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"BEFORE and after" photographs and plans of reconditioned buildings—houses, hotels, apartment houses, commercial buildings, churches, banks, etc.—are desired by the editors of American Architect. The photographs should be accompanied by the following data: Year altered, cost of alterations, increased value to owner, analysis made to determine expenditure justified, age of building, and any other factors of specific interest. Illustrations of reconditioned buildings of value to other practitioners will be published from time to time in the Plate Section, together with explanatory data. All material, whether or not accepted for publication, will be returned.

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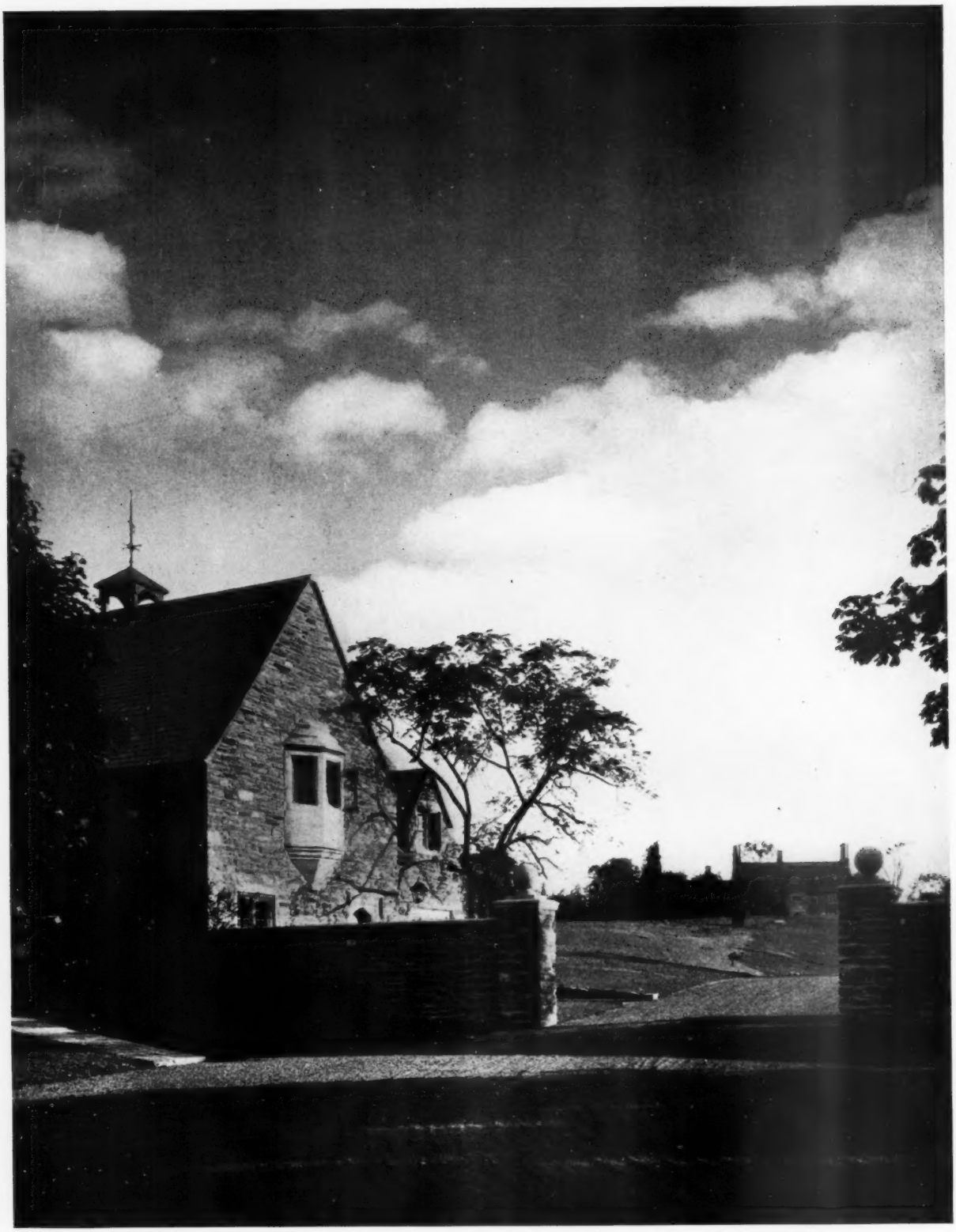

ENTRANCE AND GATE LODGE

MAIN AND GARDEN ELEVATIONS

HOUSE OF HENRY UPHAM HARRIS
BROOKVILLE, LONG ISLAND

ROGER H. BULLARD, ARCHITECT. LOUISE PAYSON, LANDSCAPE ARCHITECT. PHOTOGRAPHS BY SIGURD FISCHER

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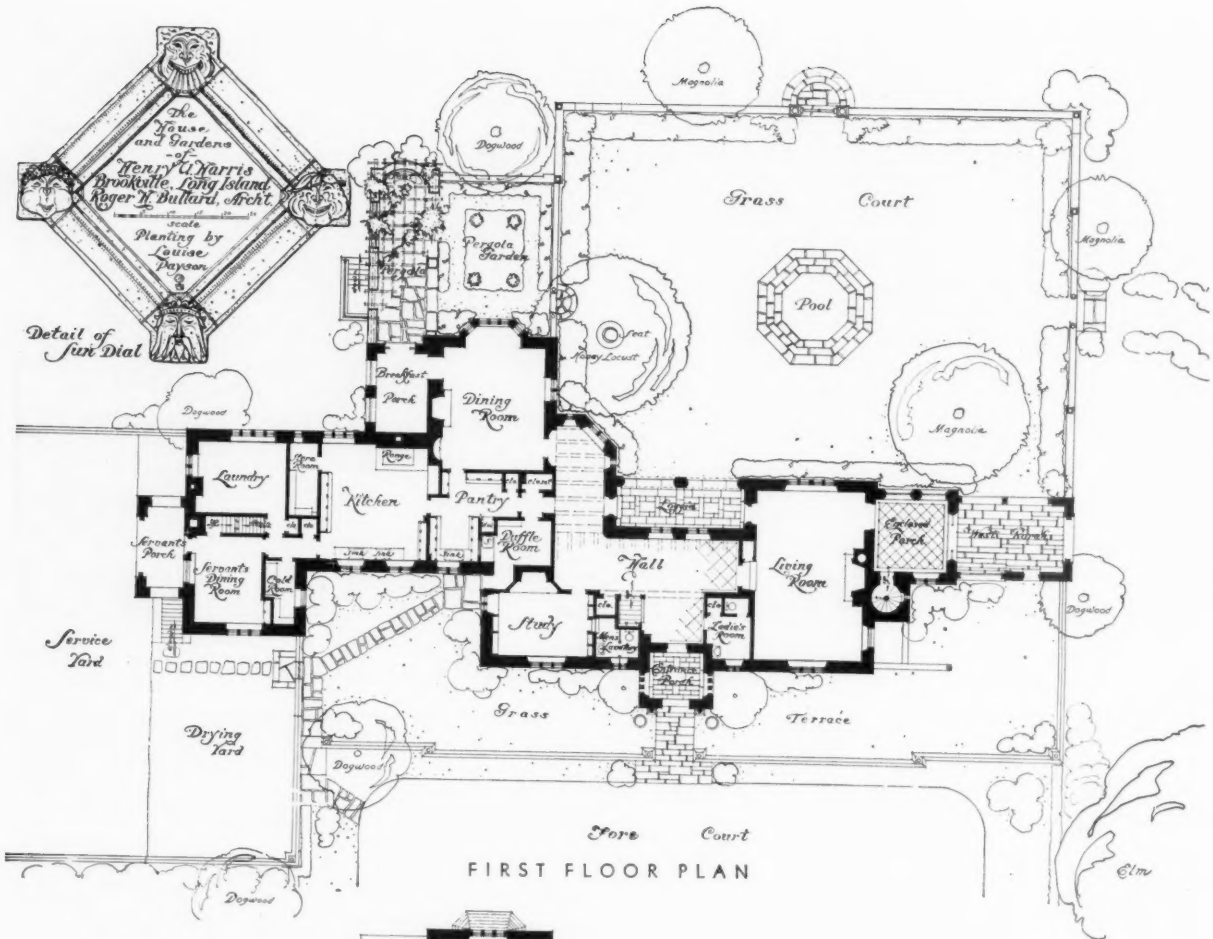
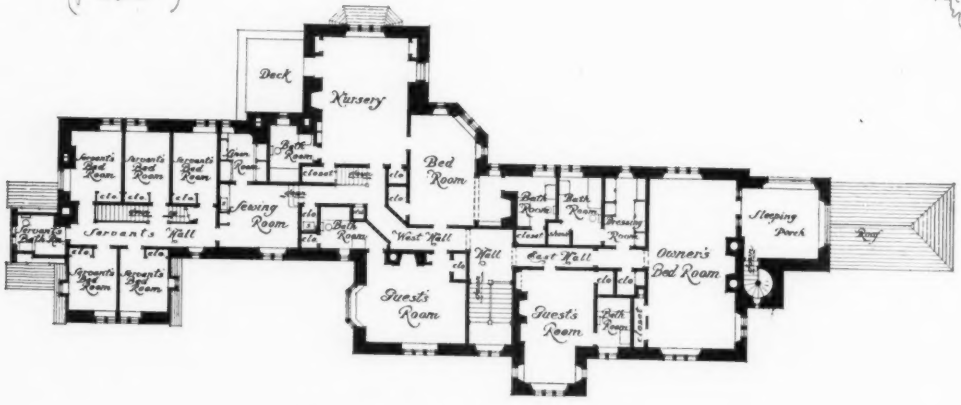


FIRST FLOOR PLAN



SECOND FLOOR PLAN

GARDEN FRONT ELEVATION

MAIN ENTRANCE

HOUSE OF HENRY UPHAM HARRIS, BROOKVILLE, LONG ISLAND, ROGER H. BULLARD, ARCHITECT

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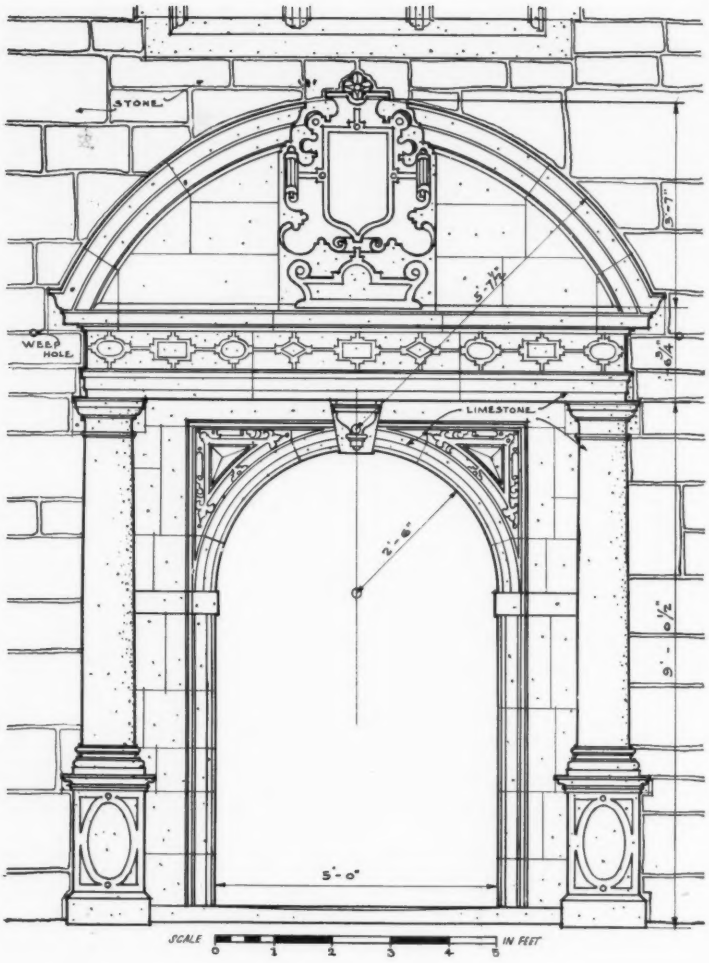
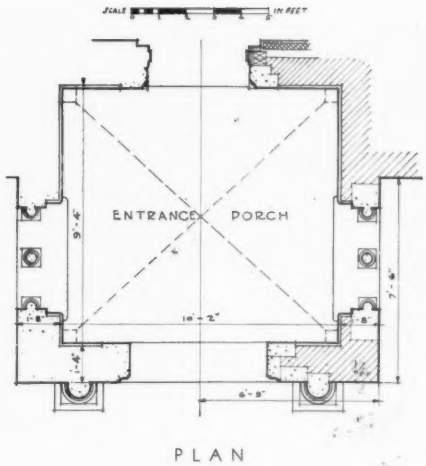
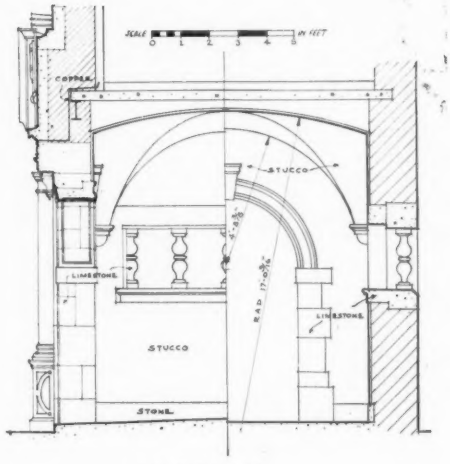


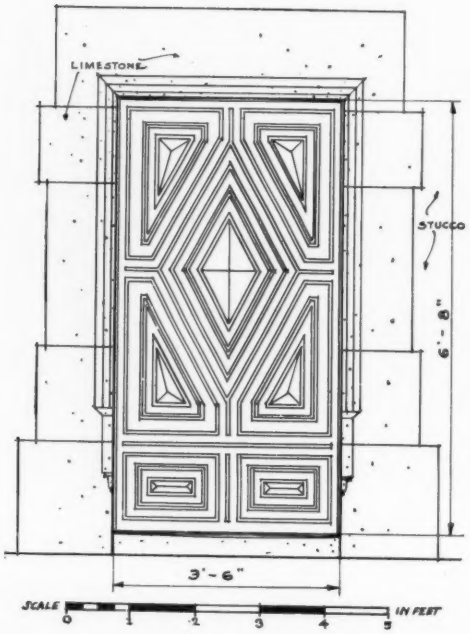
ELEVATION



PLAN



SECTION



MAIN ENTRANCE DOOR

MAIN ENTRANCE DETAILS

EXTERIOR MATERIALS

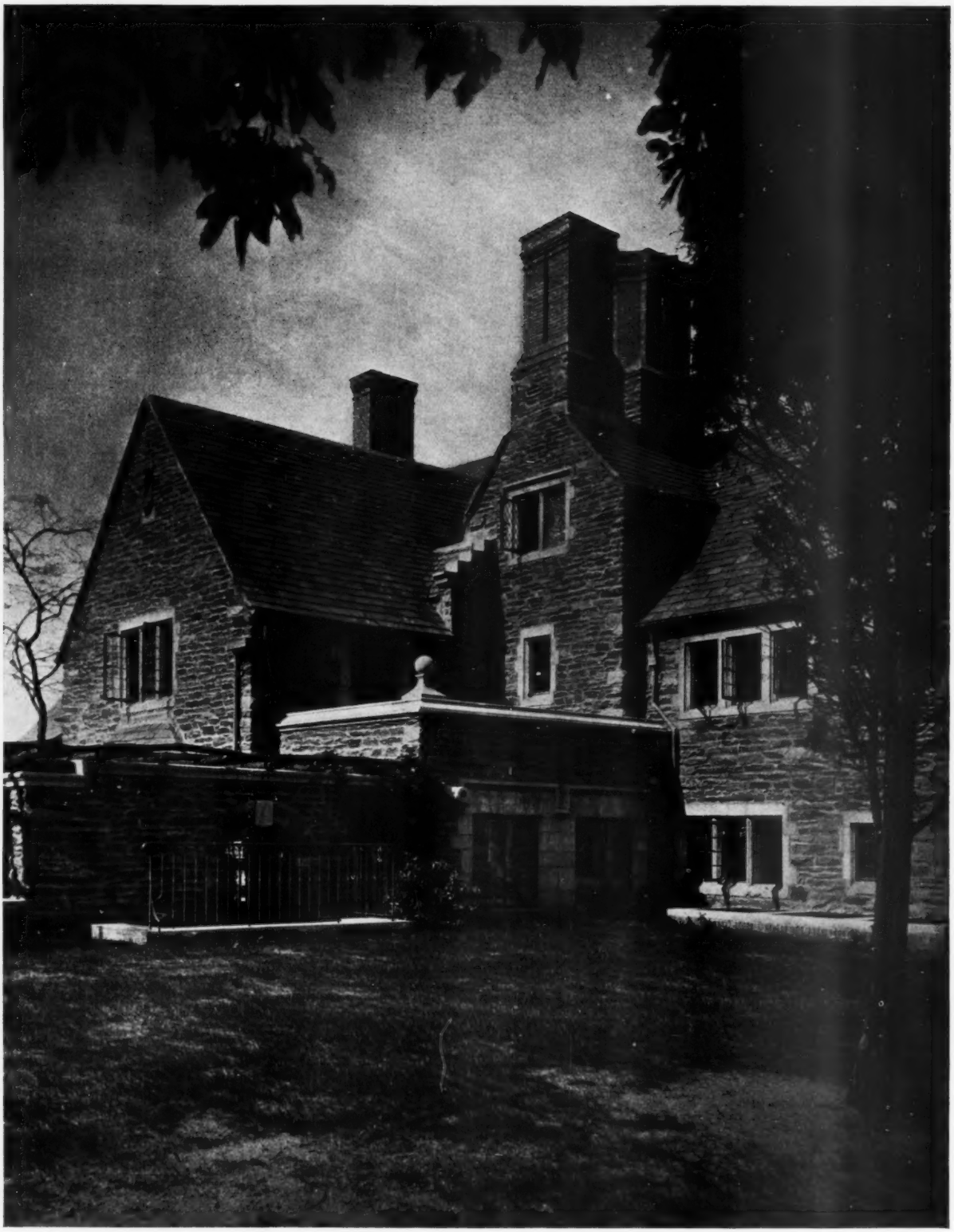
Walls, local building stone. Trim, coarse grain rustic buff limestone. Roof, Vermont slate of dark grays and russet laid in narrow weatherings and graduated to ridge. Fireproof construction except wood rafters. Main house, 208,777 cubic feet; gatehouse and garage, 39,071 cubic feet. Built in 1929.

INTERIOR MATERIALS: Walls of main rooms of first floor, sand finish plaster in natural color in a slightly uneven, wavy surface. Ceiling beams, hand hewn oak. Paneling and trim, oak. Main floors, veneered oak plank, random widths

ENTRANCE PORCH

HOUSE OF HENRY UPHAM HARRIS, BROOKVILLE, LONG ISLAND. ROGER H. BULLARD, ARCHITECT

XUM



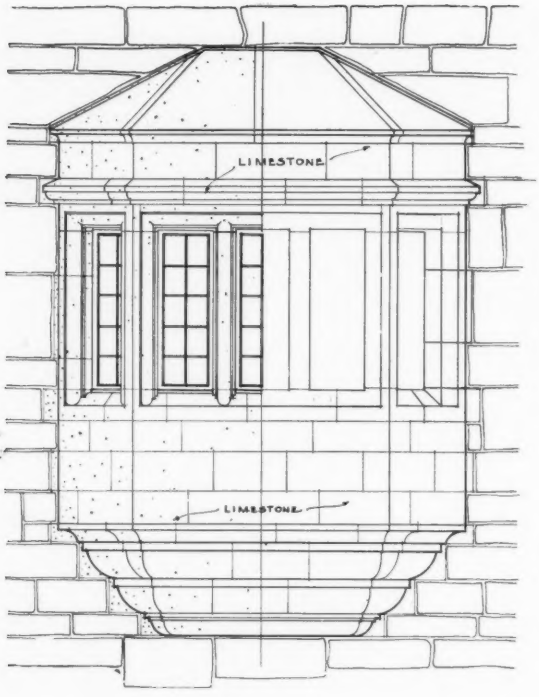
VIEW TOWARD GARDEN ELEVATION

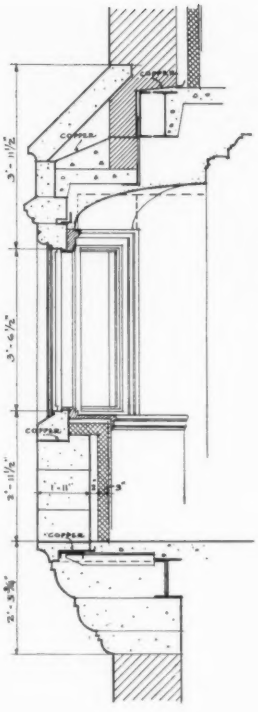
HOUSE OF HENRY UPHAM HARRIS, BROOKVILLE, LONG ISLAND, ROGER H. BULLARD, ARCHITECT

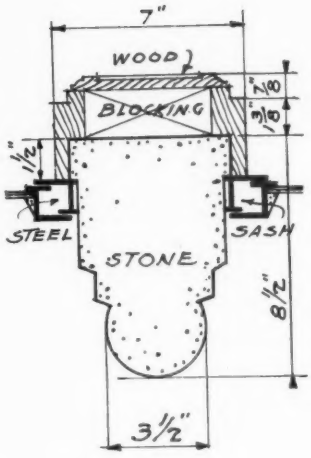
Sundial on south wall of house. Field and figures representing the four seasons are of coarse grain buff Indiana limestone. Gnomon of bronze. Designed by G. A. Mang

HOUSE OF HENRY UPHAM HARRIS, BROOKVILLE, LONG ISLAND, ROGER H. BULLARD, ARCHITECT

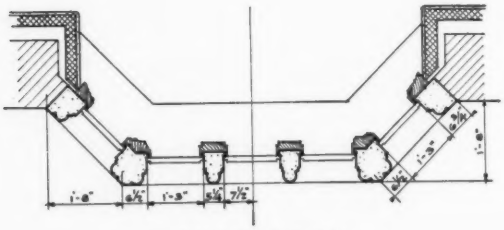
XUM



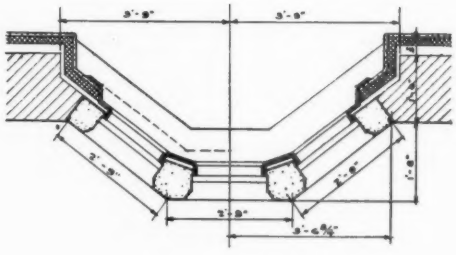




MULLION DETAIL
GUEST ROOM BAY



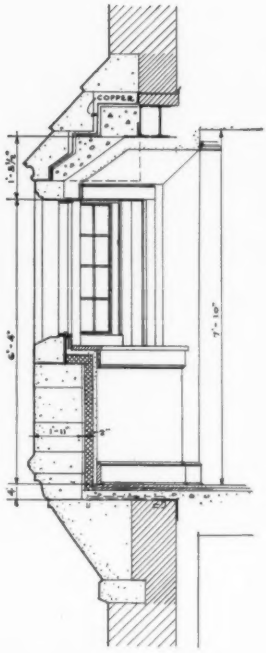
GUEST ROOM

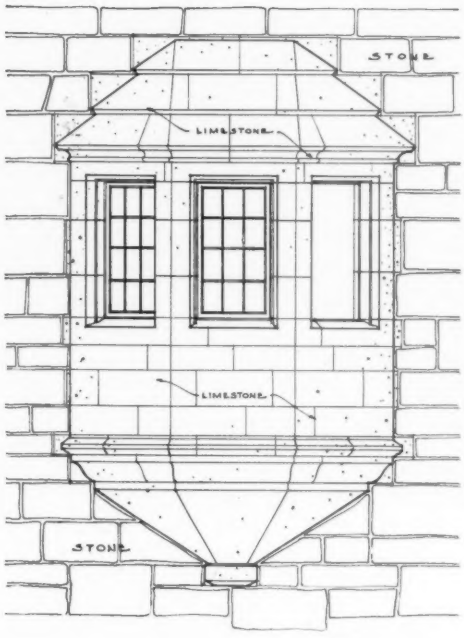


DETAILS OF BAY WINDOWS

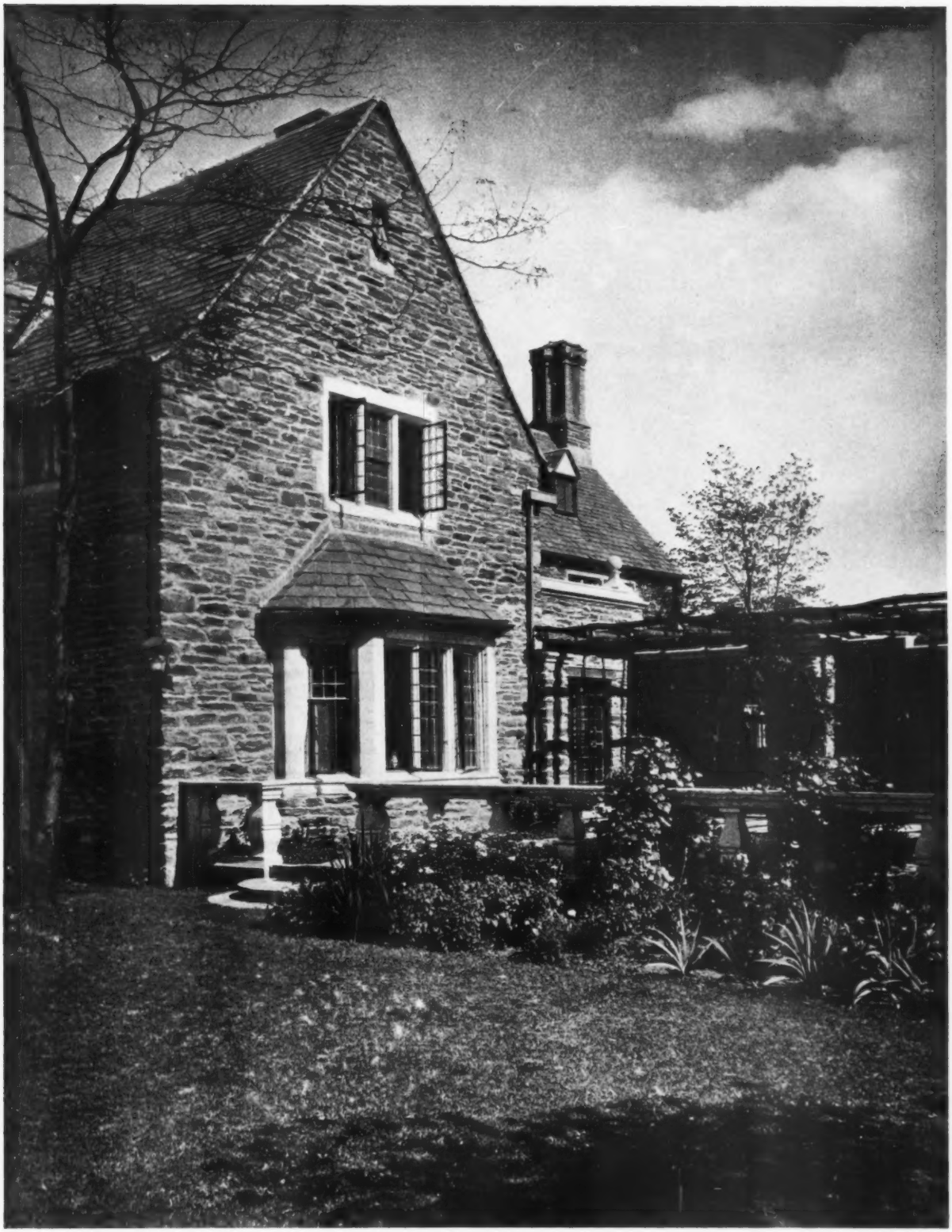
HOUSE OF HENRY UPHAM HARRIS
BROOKVILLE, L. I.

ROGER H. BULLARD
ARCHITECT





GATE LODGE



DINING ROOM BAY AND GARDEN

HOUSE OF HENRY UPHAM HARRIS, BROOKVILLE, LONG ISLAND, ROGER H. BULLARD, ARCHITECT

MAIN HALL

HOUSE OF HENRY UPHAM HARRIS, BROOKVILLE, LONG ISLAND, ROGER H. BULLARD, ARCHITECT

XUM

ENTRANCE HALL

HOUSE OF HENRY UPHAM HARRIS, BROOKVILLE, LONG ISLAND, ROGER H. BULLARD, ARCHITECT

XUM

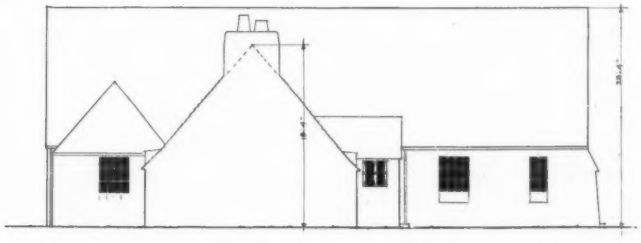
MAIN STAIRWAY

HOUSE OF HENRY UPHAM HARRIS, BROOKVILLE, LONG ISLAND, ROGER H. BULLARD, ARCHITECT

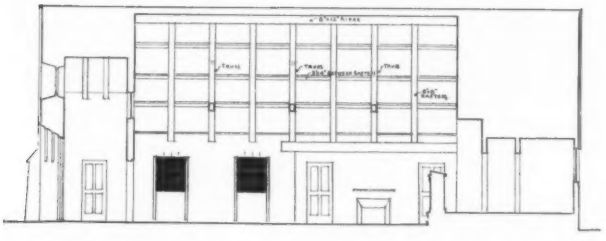
XUM

GEO. D. HAIGHT

FIRST CHURCH OF CHRIST, SCIENTIST
FILLMORE, CALIFORNIA
H. ROY KELLEY, ARCHITECT



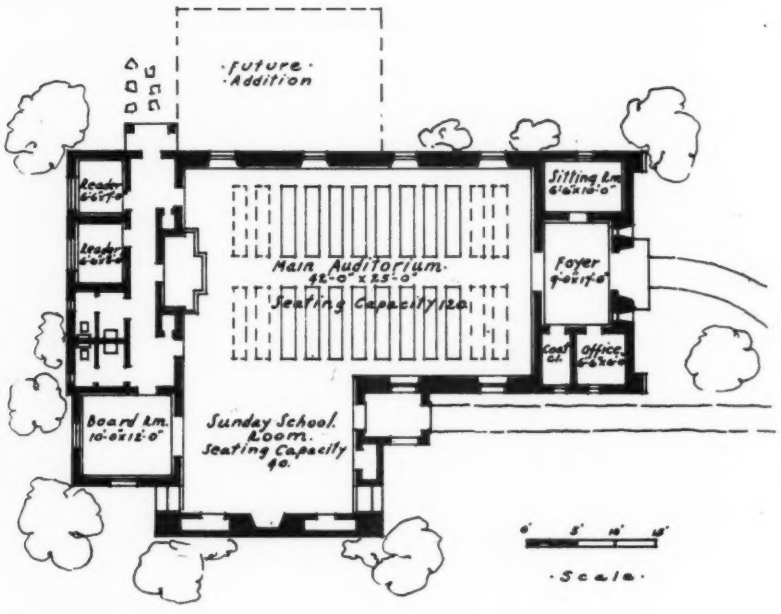
SIDE ELEVATION



LONGITUDINAL SECTION

XUM

GEO. D. HAIGHT



FIRST CHURCH OF CHRIST, SCIENTIST, FILLMORE, CALIFORNIA. H. ROY KELLEY, ARCHITECT

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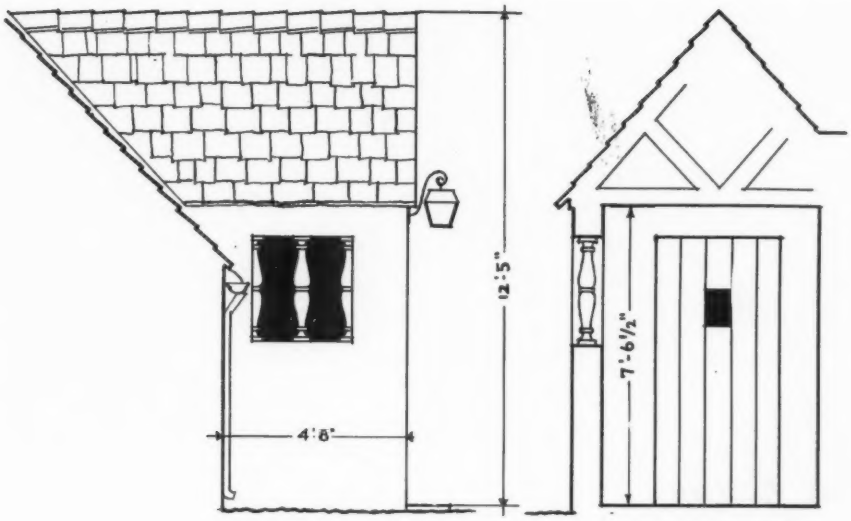
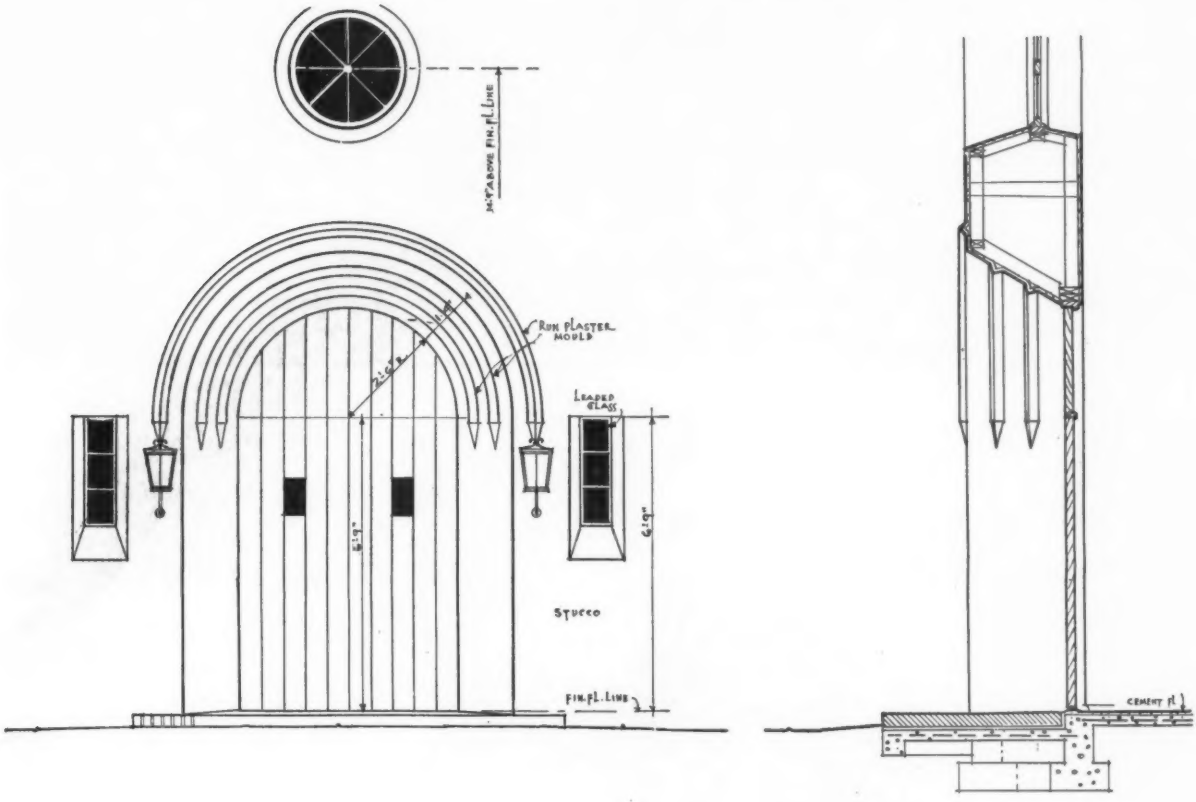
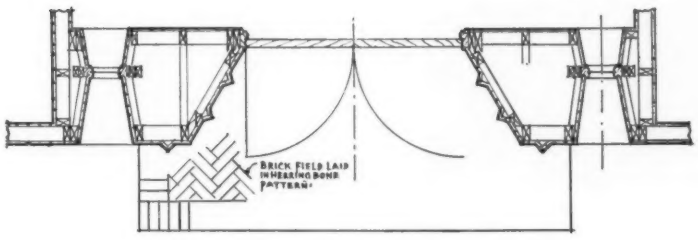


Exterior materials: Walls, cement stucco, oyster-white color. Trim, weathered oak. Roof, hand-split cedar shakes of variegated green at eaves, light moss green at ridge. 28,538 cubic feet. Built in 1929. Located in a residential district. Side wing used as reading room and Sunday School room

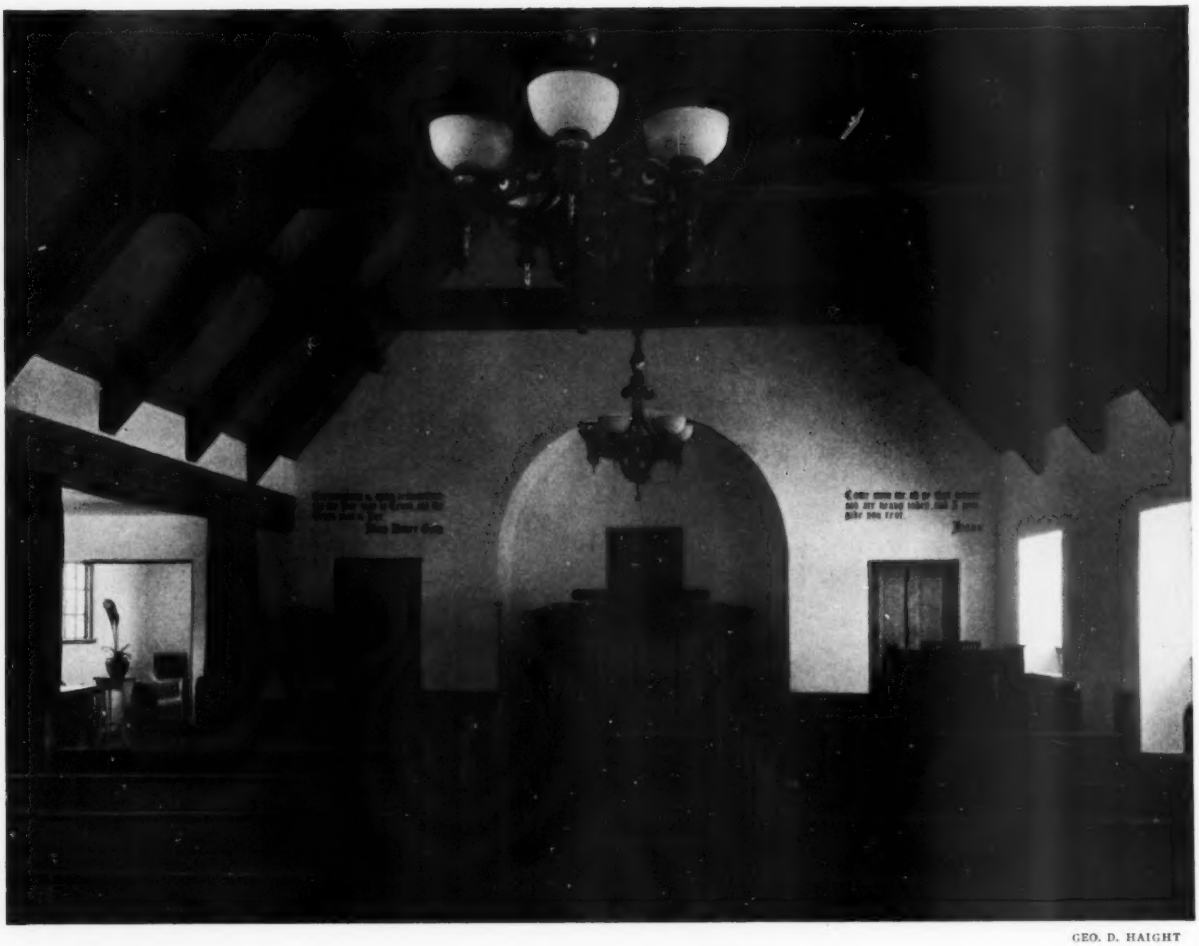
ENTRANCE TO SUNDAY SCHOOL





DETAILS OF MAIN ENTRANCE

FIRST CHURCH OF CHRIST, SCIENTIST, FILLMORE, CALIFORNIA, H. ROY KELLEY, ARCHITECT



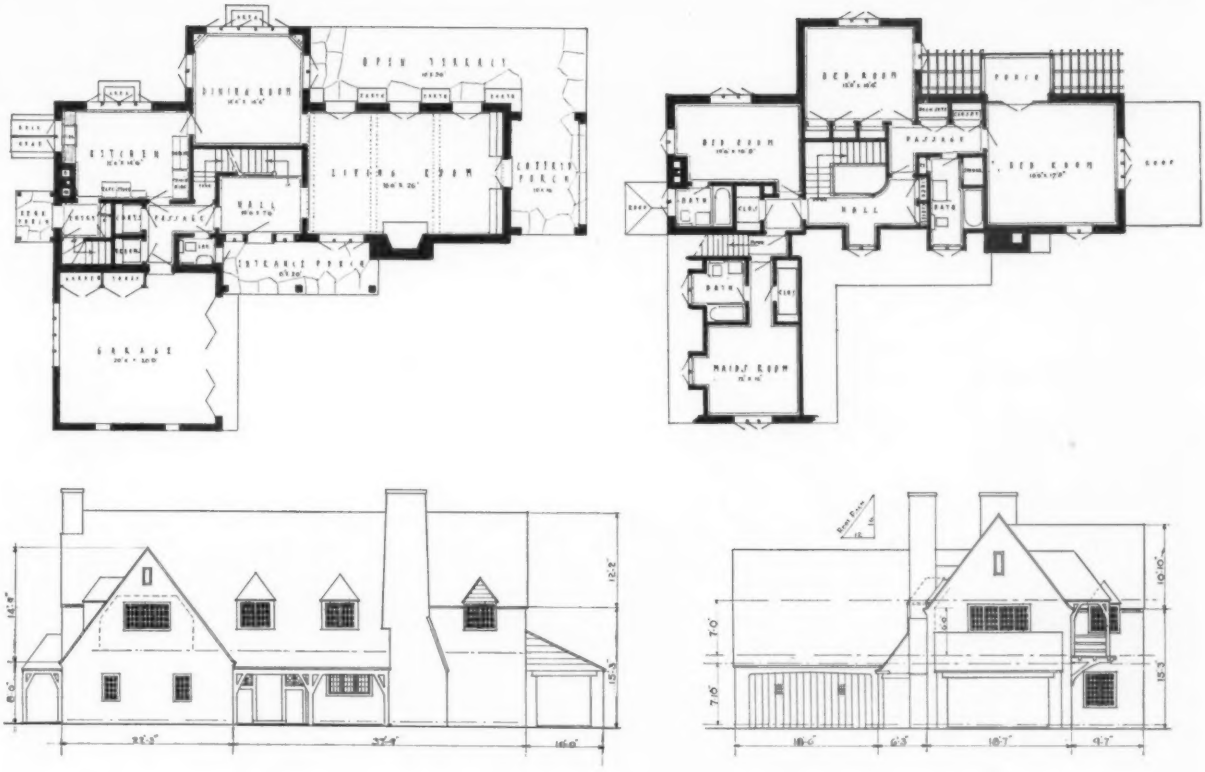
GEO. D. HAIGHT

AUDITORIUM and Sunday School Room

Interior materials: Walls, light ivory plaster. Exposed trusses and ceilings, weathered oak. Pews, oak. Floor, acid stained cement in deep red tones, marked off in 12-inch squares, 1/2-inch joints, waxed finish

FIRST CHURCH OF CHRIST, SCIENTIST, FILLMORE, CALIFORNIA, H. ROY KELLEY, ARCHITECT

DILLON



Construction: Brick whitewashed. Roof, wood shingles. Doors, frames and trim, oak stained brown. Sash, steel, leaded

HOUSE OF A. BRADLEE HUNT, DEVON, PENNSYLVANIA

DESIGNED BY A. BRADLEE HUNT

DILLON

REAR AND SIDE ELEVATIONS

HOUSE OF A. BRADLEE HUNT, DEVON, PENNSYLVANIA, DESIGNED BY A. BRADLEE HUNT

GABRIEL MOULIN

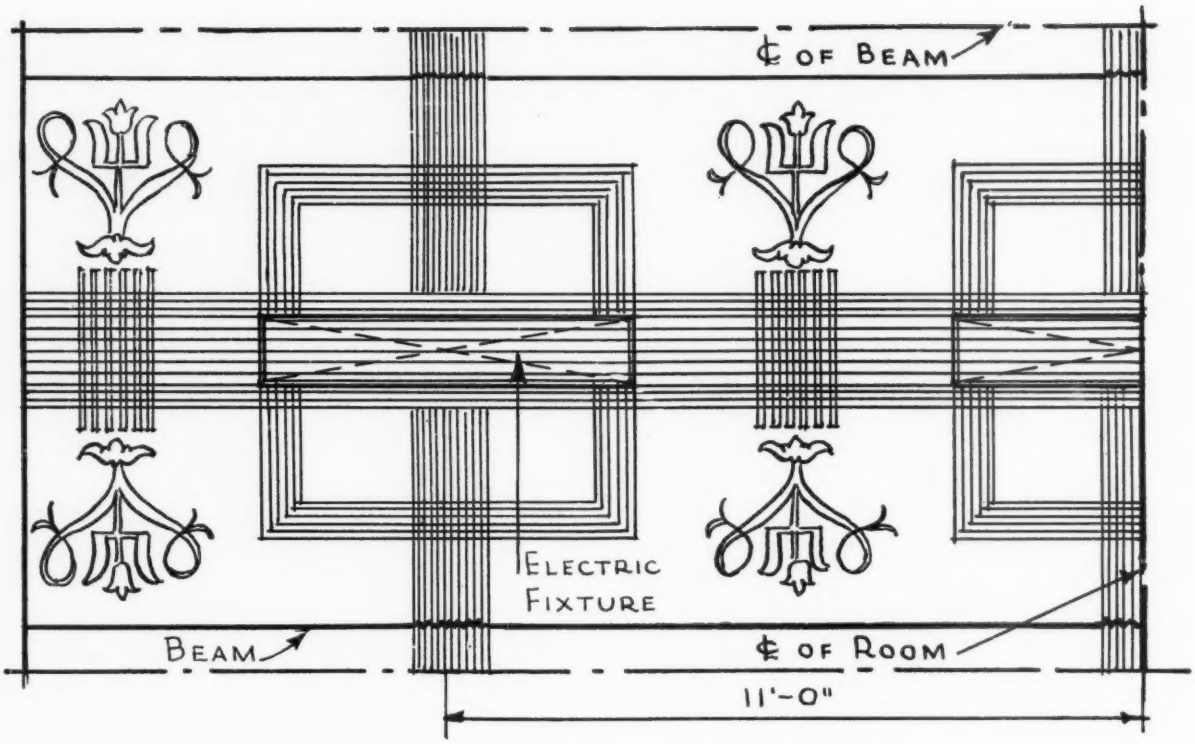
GENERAL VIEW OF LOUNGE

LUNCHEON CLUB • STOCK EXCHANGE
SAN FRANCISCO, CALIFORNIA

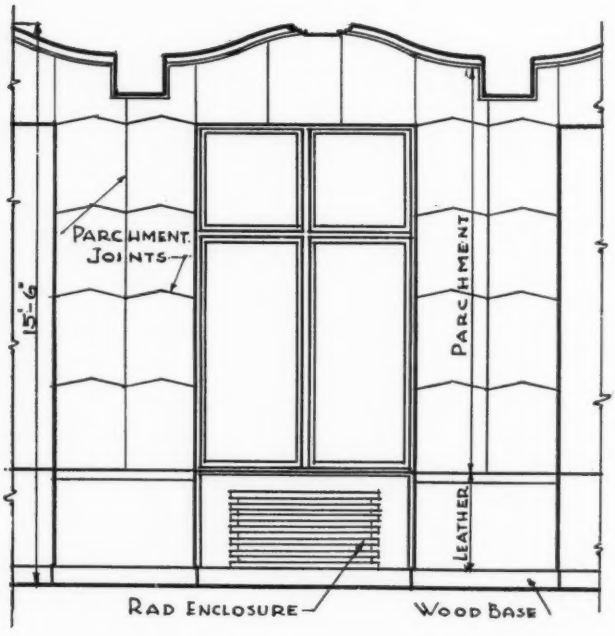
J. R. MILLER AND T. L. PFLUEGER, ARCHITECTS

PETER A. JULEY

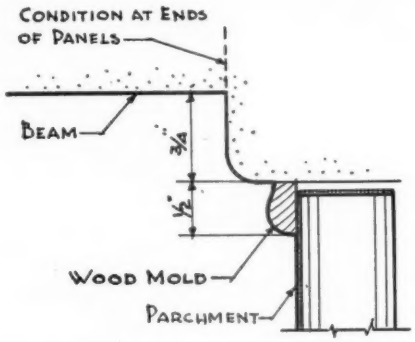
DETAIL OF FOYER



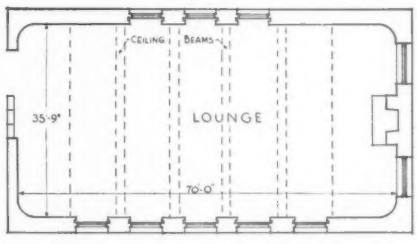
DETAIL OF ORNAMENTAL PLASTER CEILING



ELEVATION OF TYPICAL WALL BAY



SECTION AT JUNCTION OF CEILING AND SIDE WALLS

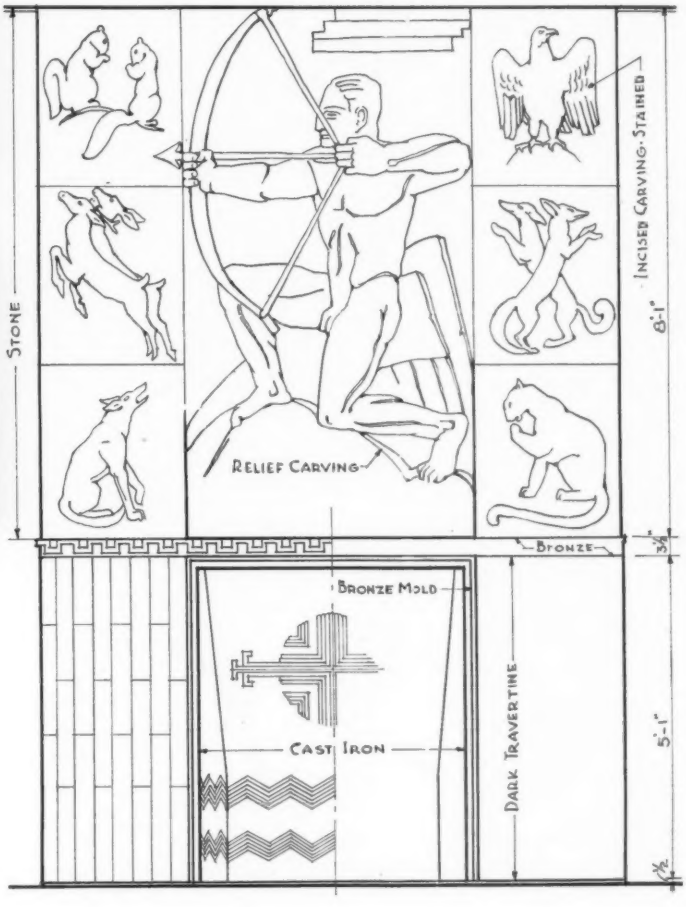


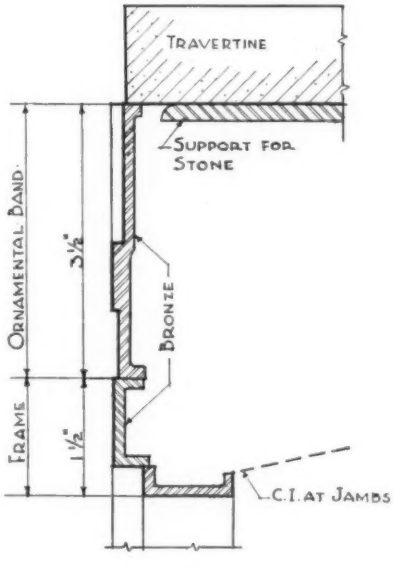
PLAN

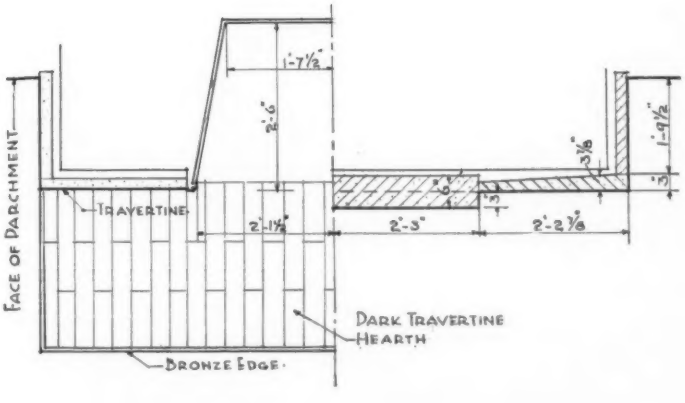
DETAILS OF LOUNGE

LUNCHEON CLUB, STOCK EXCHANGE, SAN FRANCISCO, J. R. MILLER & T. L. PFLUEGER, ARCHITECTS

MATERIALS IN LOUNGE: Walls, parchment stretched over solid laminated panels, rabbeted at edges and blind nailed. Wall behind panels lined with galvanized iron to protect parchment from moths and vermin. Ceiling: Field, light gold leaf with ornament picked out with deep gold leaf. Ceiling fixtures have flashed opal glass panels with carved stripes. Carpet, golden brown with black border. Hangings of coarse texture running from light gold to rich brown



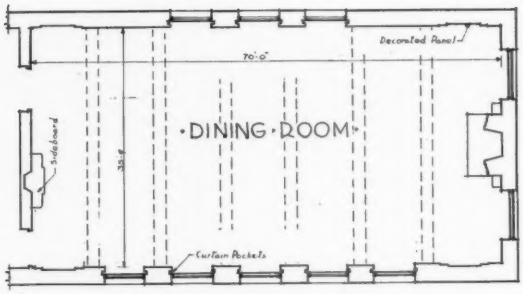




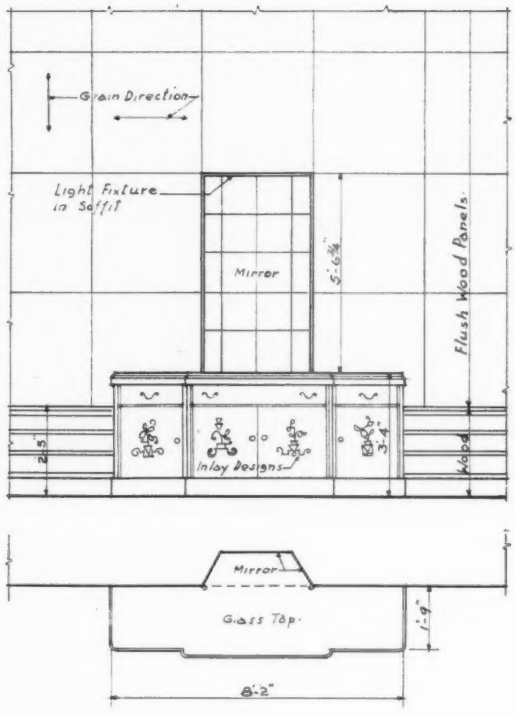
Above, detail at fireplace opening. At right, plan at and above opening. Lower part of mantel, California travertine, deep brown. Upper part, "Jeanne d'Arc" stone, square dressed tight joints; smooth surfaced; design cut after work was in place

XUM

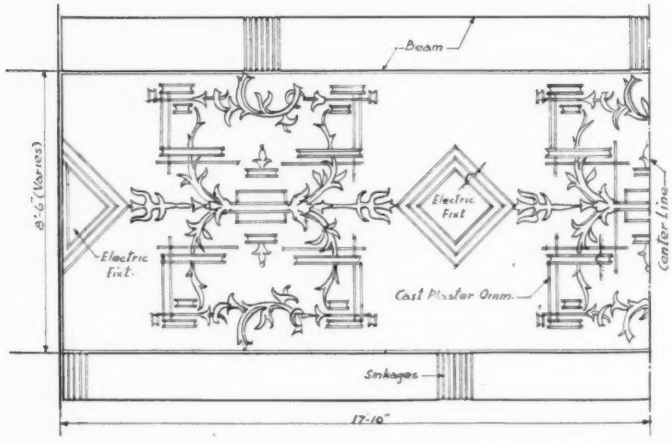
DETAIL OF WOOD INLAY WALL PANEL



PLAN



PLAN AND ELEVATION OF SIDEBOARD



ONE-HALF TYPICAL CEILING PANEL

DINING ROOM DETAILS

LUNCHEON CLUB
STOCK EXCHANGE
SAN FRANCISCO

J. R. MILLER AND T. L. PFLUEGER,
ARCHITECTS

MOULIN

DINING ROOM

Walls, "Avodire"; dado, Hungarian ash finished with clear lacquer. Window trim, alternate strips of ebony and pear wood. Grille and lighting fixtures, bronze, polished bronze and polished chromium plated. Ceiling, gold leaf. Flush ceiling lighting fixtures, carved flashed opal glass with silver plated frames. Decorative panels, wood inlay

LUNCHEON CLUB, STOCK EXCHANGE, SAN FRANCISCO, J. R. MILLER & T. L. PFLUEGER, ARCHITECTS

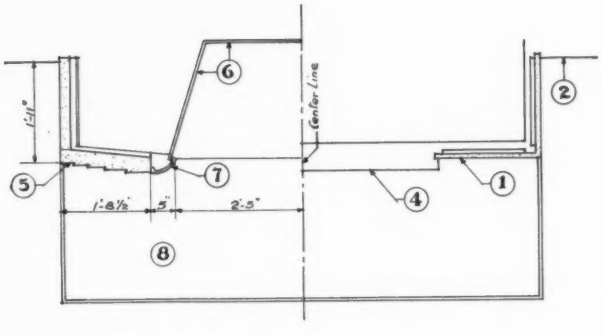
XUM

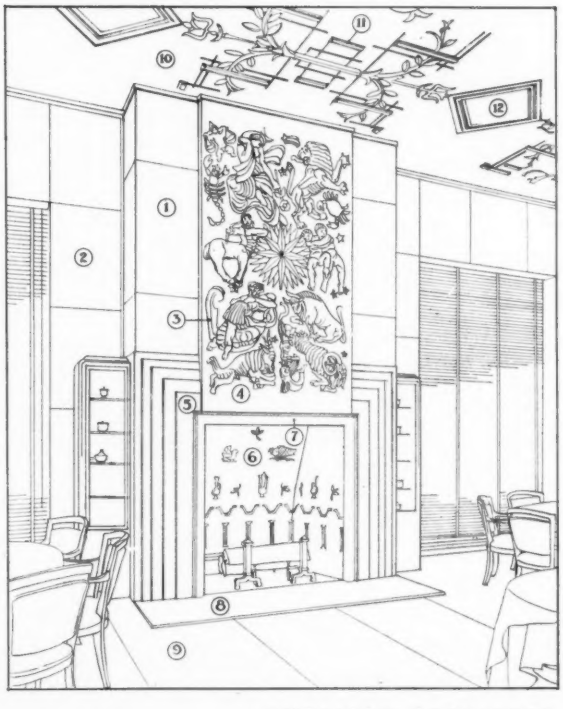
MOULIN

FIREPLACE IN DINING ROOM

LUNCHEON CLUB
STOCK EXCHANGE
SAN FRANCISCO

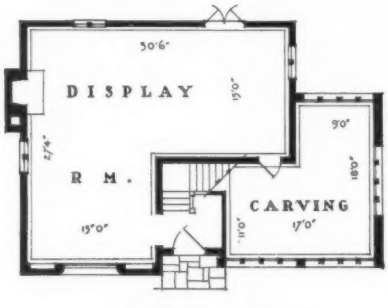
J. R. MILLER AND T. L. PFLUEGER, ARCHITECTS



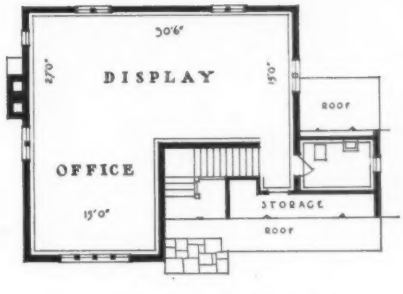


KEY TO COLORS AND MATERIALS

1: Cream Saint Genevieve marble
2: "Avodire" wood veneer
3: Cast bronze figures
4: Polished cast bronze panel
5: Dark blue Belgian marble
6: Cast iron, natural color
7: Cast bronze, satin finish
8: Granite, bronze edging
9: Carpet, green
10: Gold leaf
11: Carved flashed opal glass with silver plated frame
12: Frosted glass



FIRST FLOOR



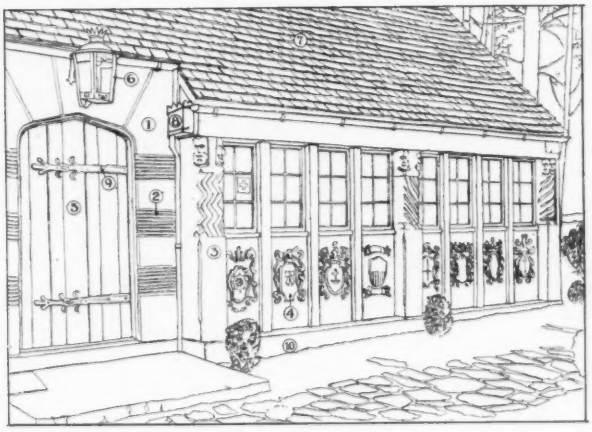
SECOND FLOOR

FRONT ELEVATION

END ELEVATION

ARTISANS' SHOP, ASHEVILLE, NORTH CAROLINA

WILLIAM WALDO DODGE, JR., ARCHITECT



1: Local stone cleft with a hammer and tooled along edges.

2: Roofing tiles 1/2 inch thick, joints 3/4 inch thick; mortar, white cement and pink sand.

3, 4 and 5: Cypress with raised grain. Shields (4) painted in various colors.

6: Copper lantern.

7: Shingle tile graduated from almost black at eaves through red to bright red and tan at ridge.

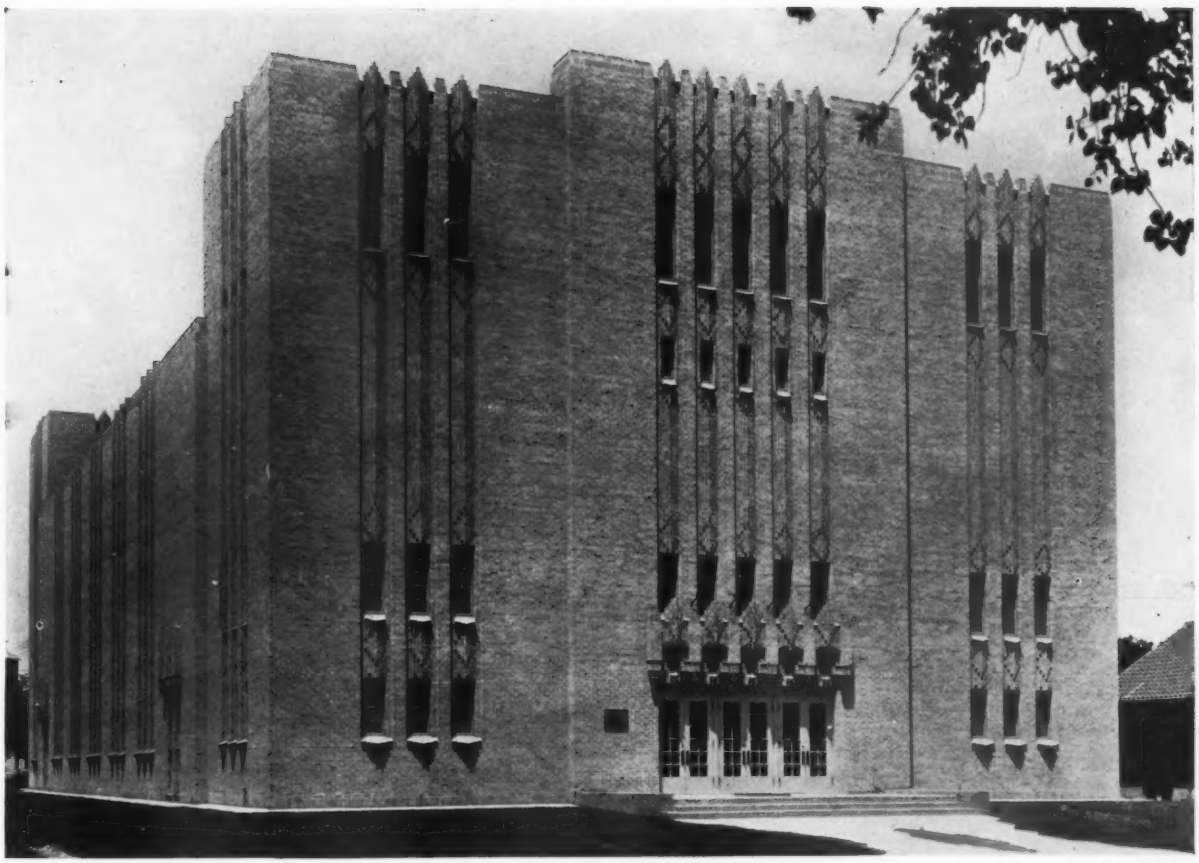
8: Copper leader head.

9: Wrought iron hinges.

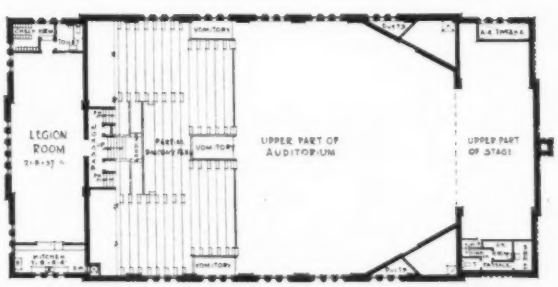
10: Concrete slab color of wood above.

ARTISANS' SHOP, ASHEVILLE, NORTH CAROLINA, WILLIAM WALDO DODGE, JR., ARCHITECT

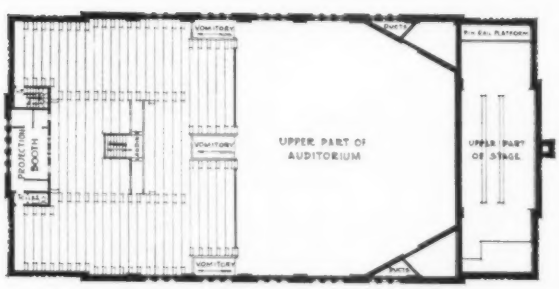
XUM



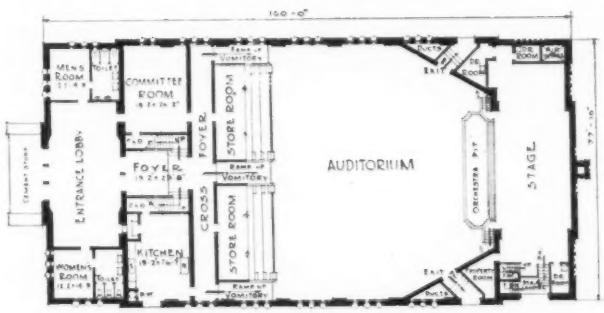
I-X-L STUDIOS



SECOND FLOOR



BALCONY



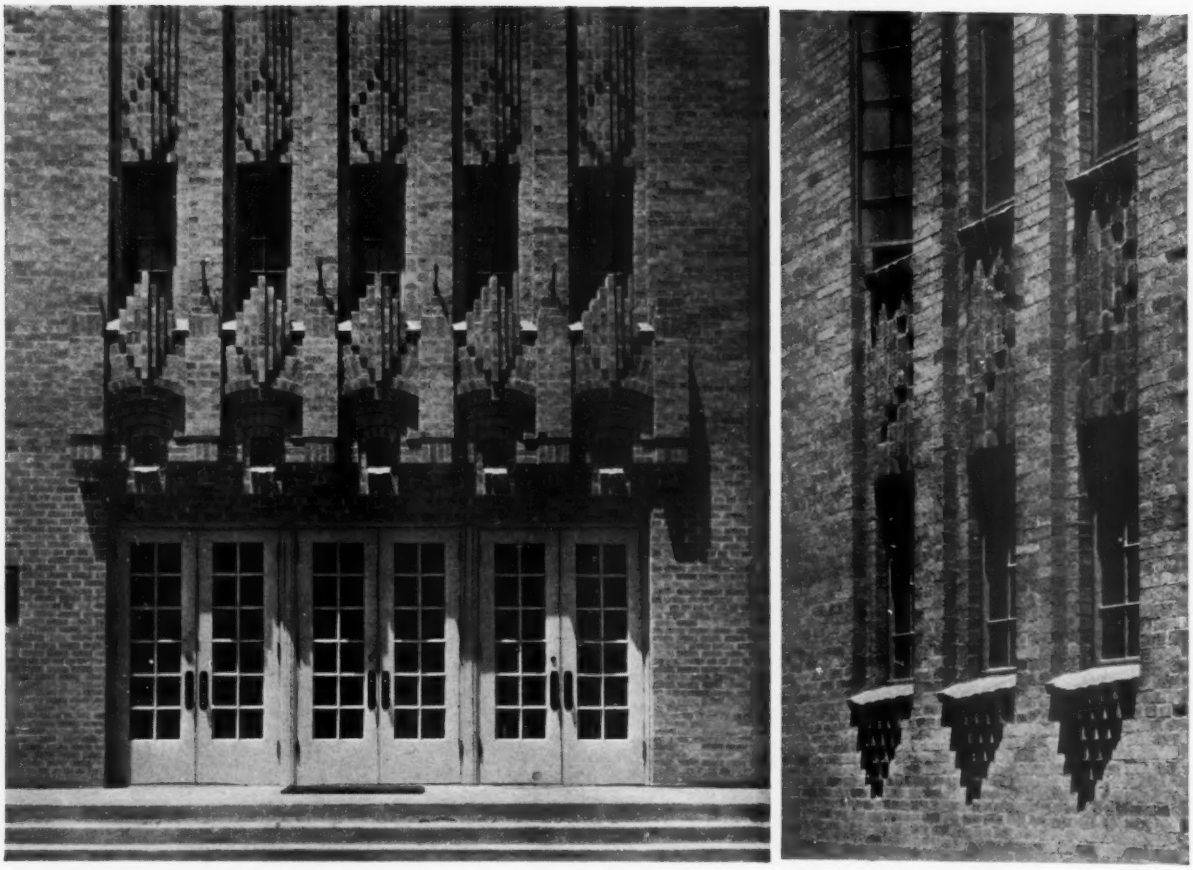
FIRST FLOOR

Exterior materials: Light cream brick; all patterns produced by use of standard sizes. Auditorium seats 1,600. Front half has a level floor which may be cleared. Rear half equipped with fixed opera chairs. Chair storage provided under balcony. Stage equipped with footlights, border lights, fireproof curtain, picture screen, to serve all types of entertainment. 567,000 cubic feet. Cost, 17 cents per cubic foot. Built as a war memorial

MEMORIAL AUDITORIUM, STERLING, COLORADO

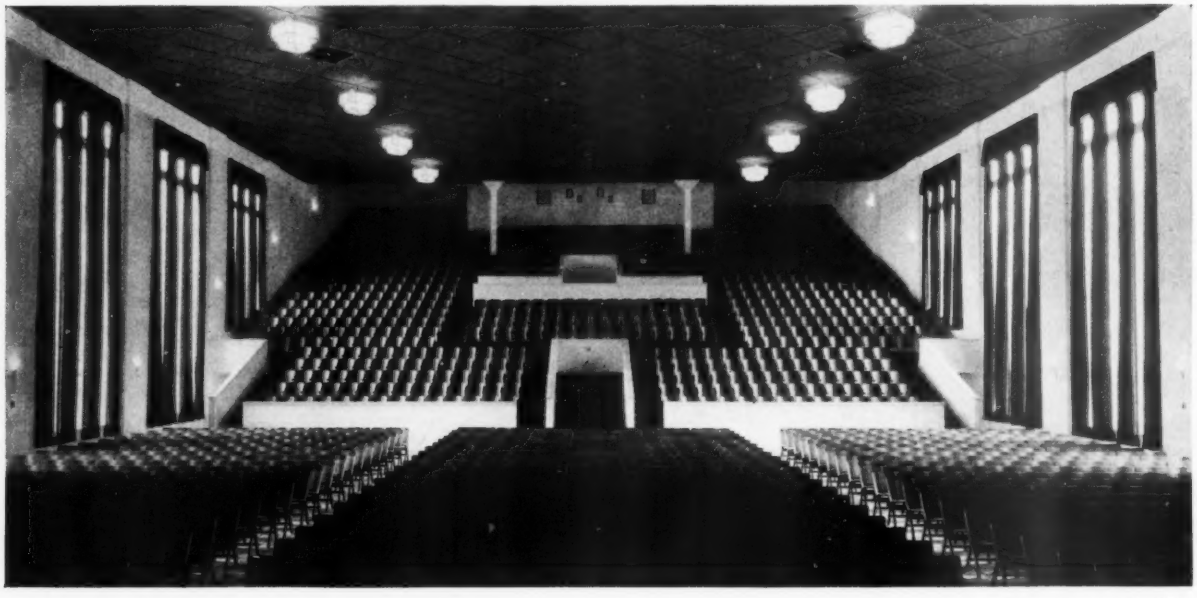
T. H. BUELL & CO., ARCHITECTS

XUM



I-X-L STUDIOS

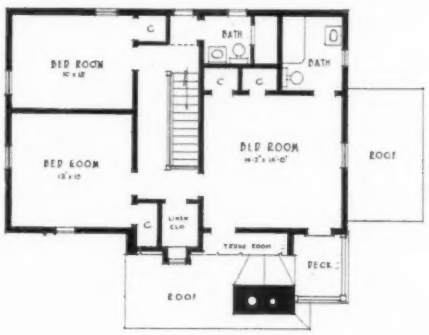
DETAILS OF BRICKWORK, MAIN ENTRANCE AND WINDOWS

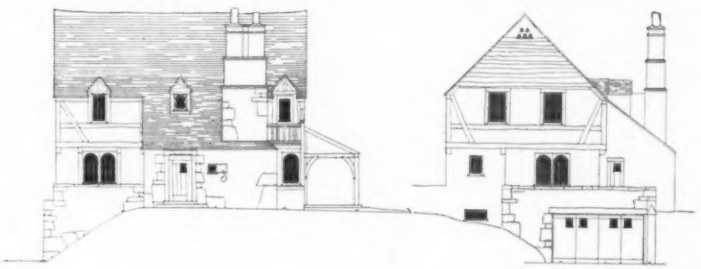


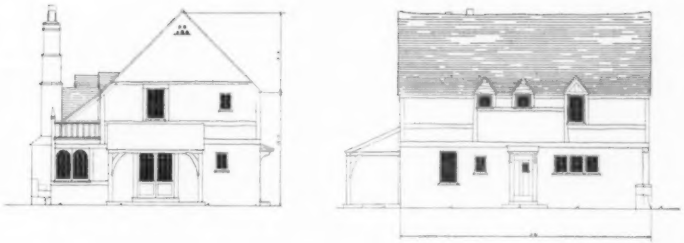
FORTNER

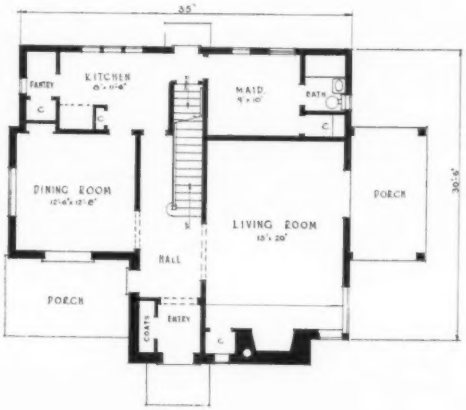
AUDITORIUM

MEMORIAL AUDITORIUM, STERLING, COLORADO, T. H. BUELL & CO., ARCHITECTS









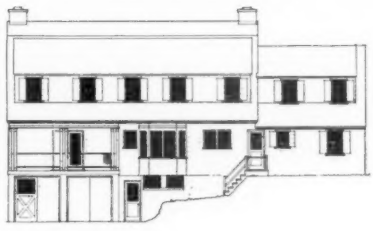
HOUSE FOR ERNEST T. HAND
PLAINFIELD, NEW JERSEY

BERNHARDT E. MULLER, ARCHITECT

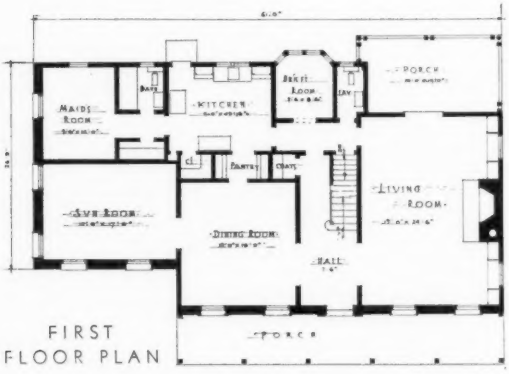
GLASGOW

FRONT ELEVATION

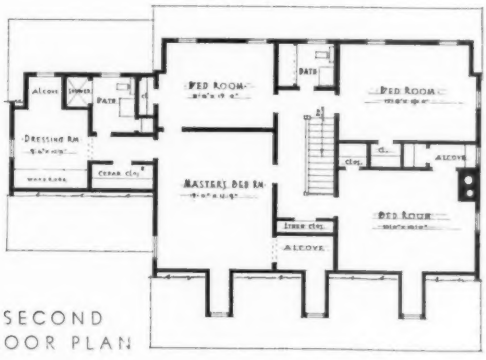
END ELEVATION



REAR ELEVATION



FIRST FLOOR PLAN



SECOND FLOOR PLAN

HOUSE OF WILLIAM ZANGLINE, MAPLEWOOD, NEW JERSEY

D. WENTWORTH WRIGHT, ARCHITECT

Built of local stone. Shingles, hand-split; on side walls, stained white; roof stained green. Trim, white. Built in 1930. 36,000 cubic feet. Cost 55 cents a cubic foot

THE READERS Have a Word to Say

• MORE ABOUT THE ARCHITECTS' SMALL HOUSE SERVICE BUREAU

Editor, AMERICAN ARCHITECT:

NATURALLY it was with gratification that I read the detailed returns and tabulation of the results of the AMERICAN ARCHITECT National Referendum on the endorsement of the Architects' Small House Service Bureau by the American Institute of Architects, and the report of the proceedings of the Institute Convention in connection with same.

I note that the convention action does not agree with the "sense of the meeting" as it was taken. And I also note that you now call for opinion as to how the Bureau should operate.

May I call your attention that the vote taken by your publication overwhelmingly indicated that the endorsement should be discontinued? That this vote was most definite and decisive and that in all states with the exception of three with a total of nine votes, eight of which were a tie, the vote was always against bureau endorsement?

The bringing in now of a question as to how the Bureau should operate confronts us with something altogether different and endeavoring to decide this, the situation must be made clearer than the Institute Convention made it. First, we must point out that the question of endorsement by the A. I. A. has been answered, and answered in no uncertain manner, before we can tackle the second question. Furthermore if the first question has been sidetracked or evaded by failure to so record same by withdrawing the approval, just where will we get with the second question through the Institute? Let the Board of Directors first act on the first question. When they do we will give them an answer to the second question.

Therefore I will state for the architects whom I represent, that our answer to your question is as follows: We are not interested in solving the Bureau problem as to how it should operate. It has been stated by the Board of Directors that perhaps the rank and file has been insufficiently informed, this after the issuing of a "report" prior to the Convention by the Bureau to every Institute member. We have only one point on which we are not informed and that is the financial report of the Bureau and who the "friends" are who were interested enough in the Bureau to make up its deficit of $125,000.00.

We architects of this state are in favor of solving this question by leaving it to the architects by rendering regular architectural services in accord with the recommendations of the American Institute of Architects for construction problems without any exceptions for any particular group, i.e. small houses, churches, schools or governmental buildings.

We have repeatedly made this point clear in our statements and campaigns. We architects need not prove that small homes cannot be done by architects. The new plate section of the AMERICAN ARCHITECT offers graphic evidence. We have yet to see actual photographic evidence that stock plans produce such excellent results in actual completed jobs.

The small house field problem was created by stock plan abuses and misuses and finally Institute endorsement of a Bureau offering syndicated services to publications which did not encourage small home owners to use architectural services as such, but rather to use stock plans.

In conclusion the architects of this state do not wish to endorse any stock plan bureau or agency nor do they wish to have anything to do with such practices, knowing full well that they are detrimental to the best interest of the public.

We advocate as we always have, full and complete architectural services which are relatively the cheapest item in a small home at regular Institute fees. That is all, no more, no less.

And we ask, now that we have through agitation and cooperation brought this question where it is, why must we now start all over again in a circle without end? We have fought this pernicious thing for more than twelve years. If the AMERICAN ARCHITECT takes the viewpoint that there is still a question to be answered, we and the AMERICAN ARCHITECT and its splendid poll have not accomplished anything.

Because of the prominent part we have played in this matter, I ask that you publish this letter, stating the views of the architects whom I represent. I also know that the architects in the surrounding territory are in complete accord with our views, which they have often expressed heretofore and for example published in the Blue Print of the Westchester County Society of Architects. The Bureau leaders are persistent. We can see in this nothing other than an attempt to again put something over on the profession, as we feel has been the case heretofore.—*Harry Lucht, President, The Architects League of Northern New Jersey, Cliffside Park, N. J.*

• FALSE CHIMNEY EXPERTS TO THE RESCUE

Editor, AMERICAN ARCHITECT:

YOUR latest number of your always interesting and and instructive magazine shows plans and pictures of several attractive houses with well placed and well proportioned chimneys.

I always ask my own draftsmen to observe carefully the handling of the chimney whenever, in trips around our suburbs, they happen to admire an attractive cottage. Good domestic design, I tell them, can usually be attributed to the degree of thought and care shown by the architect in his handling of the chimney problem.

But, I must say, that in a housing career of some twenty-seven years, it never occurred to me to suggest to my young hopefuls that they might solve the problem once and for all by simply (*Continued on page* 96)

XUM

Seaports of Old New England

(*Continued from page* 43)

picturesqueness, is good bait for the tourist; and nature provides the bait for the fish business. Life is simple in Provincetown.

From Provincetown to Salem is a long jump, both in geography and in spirit. By motor it is a pleasant trip along the ancient King's Highway that skirts the coast; one leaves the Cape Cod atmosphere gradually, passes the old Pilgrim town of Plymouth, the unrenowned but lovely Common at Cohasset; and soon becomes entangled in the labyrinth of Boston suburbs. With time and patience one can hunt out the Royall House at Medford, the venerable Fairbanks house, America's oldest house, at Dedham, and some good seventeenth century work at Melrose and Saugus.

Up the famous North Shore from Boston lies Salem, —time, fire, and what we know as progress have taken heavy toll of that old-time leisurely atmosphere except in a few choice spots. Chestnut Street is still one of the noblest streets in New England. As one approaches from the center of the town, one finds the stately little 1818 Custom House still looking down the length of Derby Wharf. In this structure, "partaking of the Ionic order," Nathaniel Hawthorne served three years as Surveyor of the Port, as he so charmingly records in his introduction to "The Scarlet Letter."

That was in 1846-1848; even then the harbor was a deserted place. Derby Wharf, where tall-sparred Indiamen were once berthed three deep, was already a crumbling, tide-washed spectre. Today the whirr of the factory has replaced the sailors' chantey, and along the harbor front the fine old square houses from which lords of shipping once gazed down at their teaming docks are tenanted by throngs of alien mill-hands. Gigantic coal derricks supply the only note of harbor activity.

ONE amenity remains: at the foot of Turner Street, its shaded lawn stretching to the water's edge, stands the House of the Seven Gables, one of the most satisfying glimpses in New England of the seventeenth century. The face of the house is flush with the sidewalks of the narrow lane; the rear, with its rambling ells and its neighbor, the Old Bakery, forms a background of weather-stained pine around a charming perennial garden, in which meals are served.

Almost a part of Salem, yet utterly different in spirit, is old Marblehead, that weatherbeaten town that clings to a rocky point a few miles to the east. The town contains the two renowned and imposing mansions of Jeremiah Lee and King Hooper; the 1727 Town Hall, freestanding in its Square; and many battered and amusing old houses down toward the harbor.

Time was when Newburyport, a few miles north of Rowley, bade fair to become a leading metropolis of the East. Located a few miles upstream from the mouth of the Merrimack River, she put up a staunch fight with her neighbors, Salem and Portsmouth, for the shipping of the region. Today the river flows calmly past a few deserted wharves, a few fishermen, a few children playing in a clumsy dory. Yet in 1810, no less than 140 merchant vessels had "Newburyport" painted across their bluff sterns, and 21 more were under construction on the ways. From this harbor "Lord" Timothy Dexter sent out his famous load of warming pans to the West Indies—the warming pans that found such unexpected use as ladles in the sugar refineries, and brought a goodly return to Lord Timothy. In this harbor was built the Atlantic packet, "Dreadnaught," probably the fastest and most celebrated sailing vessel to fly the American flag. Her passage of 9 days and 13 hours from New York to Queenstown still stands as a notable achievement.

ALTHOUGH the houses of Newburyport are less renowned than Salem's, her "nabobs' row" along the two mile stretch of High Street is one of the most stately in New England. Many of them are of the three-story square type, often with captain's walk and cupola.

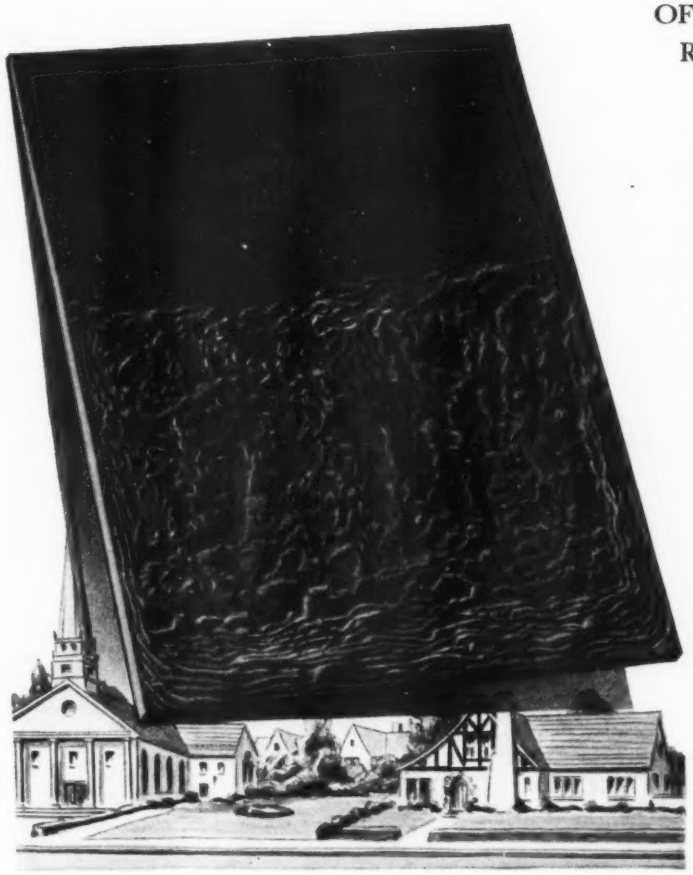
The Babson house, a simple vine-covered brick mass, has an amusing interrupted belt course which crops up only over the windows; the Thomas Hall house is charmingly surrounded by a perfect picket fence. Probably the most imposing in town is the quoined and cupolaed mansion of "Lord" Timothy Dexter. Although shorn of its monumental forecourt where Lord Timothy once ranged his amazing collection of statues, the house is decidedly impressive as it stands on its terrace above High Street; the chimneys are probably unique, with their full regalia of quoins and cornice.

It is easy to see why "the Strawberrie Banke" was chosen as the site of Portsmouth. The Piscataqua, a long reach of the sea, here broadens out to the semblance of a landlocked lake. To the north is the rocky shore of Kittery, beloved of Whittier; to the south rises a gentle slope up which the town has grown. Mason Hall was built at Odiorne's Point, the Plymouth Rock of New Hampshire, in 1623. In 1631, Humphrey Chadburne erected the Great House at Strawberry Bank, the present lower harbor, and Portsmouth was begun. The town today has a dignity and repose that are above the passing years. The twentieth century has brought few intrusions; there are no depressing ruins of the past.

When George Washington visited Portsmouth in 1789 he spoke rather slightingly of the architecture: " . . . there are some good houses," he inscribed in his diary, "but in general they are indifferent, and almost entirely of wood." Accustomed to the splendors of the Southern mansion, he was not attracted by the Jacob Wendell house in Pleasant Street, with its unique whale oil lamp finial in the broken pediment of the entrance, or the sturdy Georgian dignity of the Warner house behind St. John's, to mention only two of the delightful pre-Revolutionary houses in town.

St. John's church, high on the hill above the harbor, boasts one of the four Vinegar Bibles in the country, a bell captured from Louisburg in 1745, and a remarkably naive interior. The plaster vaulted ceiling over the cen-

Architects Widely Acclaim the Gothic
Eternit's *Newest* Asbestos Shingle



RUGGED TEXTURE, RANDOM WIDTHS, HEAVY BUTTS and MELLOW COLORS OFFER UNUSUAL OPPORTUNITY FOR ROOF INDIVIDUALITY WITHOUT PRICE PREMIUM

From Coast to Coast architects have been most generous in their praise of Eternit's newest asbestos shingle, the Gothic. They immediately recognized in the unique features of the Gothic, values heretofore unknown in roof beauty, individuality, durability and economy.

Under today's building conditions, no architect can afford to ignore these eight major Gothic features:

1. AGELESS AND FIRE-PROOF. Ingredients: Portland Cement, reinforced with asbestos rock fibres. Both are time and fire-defying.
2. TAPERED CONSTRUCTION. Designed to provide thickness and strength where it is most required. Needless weight eliminated.
3. RUGGED TEXTURE. 7″ exposed shingle area, textured like rugged rock, carved by time.
4. MELLOW COLORS. Ten rich, time-mellowed colors. Ideal for color harmonies or color contrasts.
5. RANDOM WIDTHS. Full size shingle 12″ x 16″. Supplied also in random widths of 5″, 6″ or 7″.
6. STAGGERED BUTTS. Double sets of punched nail holes permit laying irregular shingle courses.
7. DEEP SHADOWS. Butts are 5/16″ thick, assuring deep, massive shadow lines.
8. MODERATE COST. Saving in both materials and labor permits roof cost in keeping with 1932 incomes.

No expense has been spared to make the Gothic the type of shingle that will win your admiration and confidence. See it yourself. Samples and architect's folder will be mailed upon request. Write or telephone the nearest Eternit or Ruberoid office today.

Eternit

ASBESTOS CEMENT SHINGLES

ETERNIT, *Sales Division of* THE RUBEROID CO.

Offices: BALTIMORE, MD., CHICAGO, ILL., ERIE, PA., MILLIS, MASS., MOBILE, ALA., NEW YORK, N. Y.

Factory: ST. LOUIS, MO.

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ter aisle rests directly on rows of columns, without benefit of cornice. The whole is painted gray, with some remarkable decorations in grisaille, the idea, the custodian proudly says, of the first rector. But the most astounding church in Portsmouth is old South, an early attempt at the supposedly modern all-glass construction. When the building was being planned, Mr. Henry Sherburne, a pious churchman, offered to provide the window glass; the thrifty parishioners erected a church whose walls, between the piers, were almost solid windows.

Portsmouth has her share of three-story square houses —the post-Revolutionary contribution of the New England seaport. The Langley Boardman house with its flush boarded front and delicate semicircular Ionic porch, and the brick Larkin house, might well be the work of Bulfinch. The Athenaeum in Market Square is also in the manner of Bulfinch, but the only authenticated building of his is the Academy, now the Public Library.

The upper harbor above the bridge does have a bit of activity with its coal barges and its lobsters. The warehouses of brick, presumably built after the great fire of 1814, rise from the water's edge. The cupola of St. John's still looks down on steep, winding streets, and across the harbor towards Badger Island. There, in 1777, John Paul Jones' frigate "Ranger" slid into the water beginning her glorious career. The harbor is full of ghosts of bygone heroes. If the moon is right you can see them—Decatur, Bainbridge, and the gallant Lawrence.

Modernization Shows Would Boost Business

(*Continued from page* 13)

should be included. For instance, on Main Street there is a group of stores that could be made more attractive. Present conditions and improved possibilities can be shown by photographs, drawings or models. Untenantable upper floors of downtown buildings can be reclaimed for offices, studios and apartments. A few outmoded houses, found in every city, can be shown together with suggested changes for improving their appearance through changing the roof lines, removal of superfluous porches, turrets and jig-saw work and making them livable through the combining of parlors and reception halls, more convenient kitchens, and large closets made into bathrooms. In all cases, charts showing the estimated cost of improvements should be displayed.

Public improvements of various kinds should not be overlooked. Every community has its own problems of this nature. The value of the employment of labor on public improvements that benefit the entire community as contrasted with the support of the unemployed by charity should be stressed. Funds so used stimulate business activity, put money into circulation, provide a return on the investment, and enable labor to maintain its self-respect doing constructive work.

The Philadelphia Committee, Better Homes in America, is making awards for reconditioned homes. Medals and certificates are to be awarded for the best executed reconditioning projects of 1932 submitted to the committee. This idea could be utilized to advantage in connection with a modernization exhibition. It would offer splendid publicity material in either or both of two ways. A prize could be offered for work completed before the opening of the exhibition and the award made at the opening of the exhibition. As a continuing feature of the exhibition an award could be made for the best reconditioning job inspired by the exhibition displays.

The most profitable and probably most easily secured building material exhibit would appear to be a series of well designed and varied rooms. These might be confined to rooms of average size such as found in most houses. The items modernizing each room should be tabulated and their costs given. For instance, one room might be painted. Give the cost of painting a room of the size shown. Do the same with papered walls and painted trim, a new corner cupboard, new screens, window hangings, reconditioned floors, furniture, and so forth. Show a modern bathroom and give the cost of the fixtures and the cost of other fixtures that might be used. Set up a typical kitchen with convenient cupboards, a new sink contrasted with an old, a new range and refrigerator. Again, give the prices of items shown and the price for which other similar items can be obtained, installed. Costs would form an important part of the exhibit, due to the ignorance or mistaken ideas of the public on this subject.

Little imagination is needed to vision the vast publicity possibilities of an exhibition of this kind. Building material dealers and contractors would be quick to sense its value to them and advertise it. Local stores would benefit and no doubt advertise it. Local transportation companies would support it. Newsreels of it would find a place in the local movies. Civic organizations would immediately sense its importance to the community and perhaps sponsor or indorse the movement. Prominent architects and builders could be secured to address clubs, schools and other groups. The radio should be utilized. And with so much activity the newspapers would be certain to lend their support.

It would offer an unusual opportunity for achitects to present to the public information on the practical dollars and cents value of their services. This could be done through group advertising in the newspapers, public addresses, radio, and a generally distributed folder or booklet. Along with this and in connection with the exhibition, the consulting idea presented by Arthur B. Holmes of Montclair, N. J., published on page 14 of the June, 1932, issue of AMERICAN ARCHITECT could be promoted in a dignified and professional manner.

A home modernization campaign in 200 cities will and labor before the close of the summer, according to result in the expenditure of about $25,000,000 in material a survey made by the Committee on Home Modernization of the United States Department of Commerce. The potential possibilities of a modernization exhibition at the present time as a means of stimulating building activity and placing the architectural profession in close contact with the public should be seriously considered. The cost should not be great and the cost represented in time and personal effort should be well rewarded.

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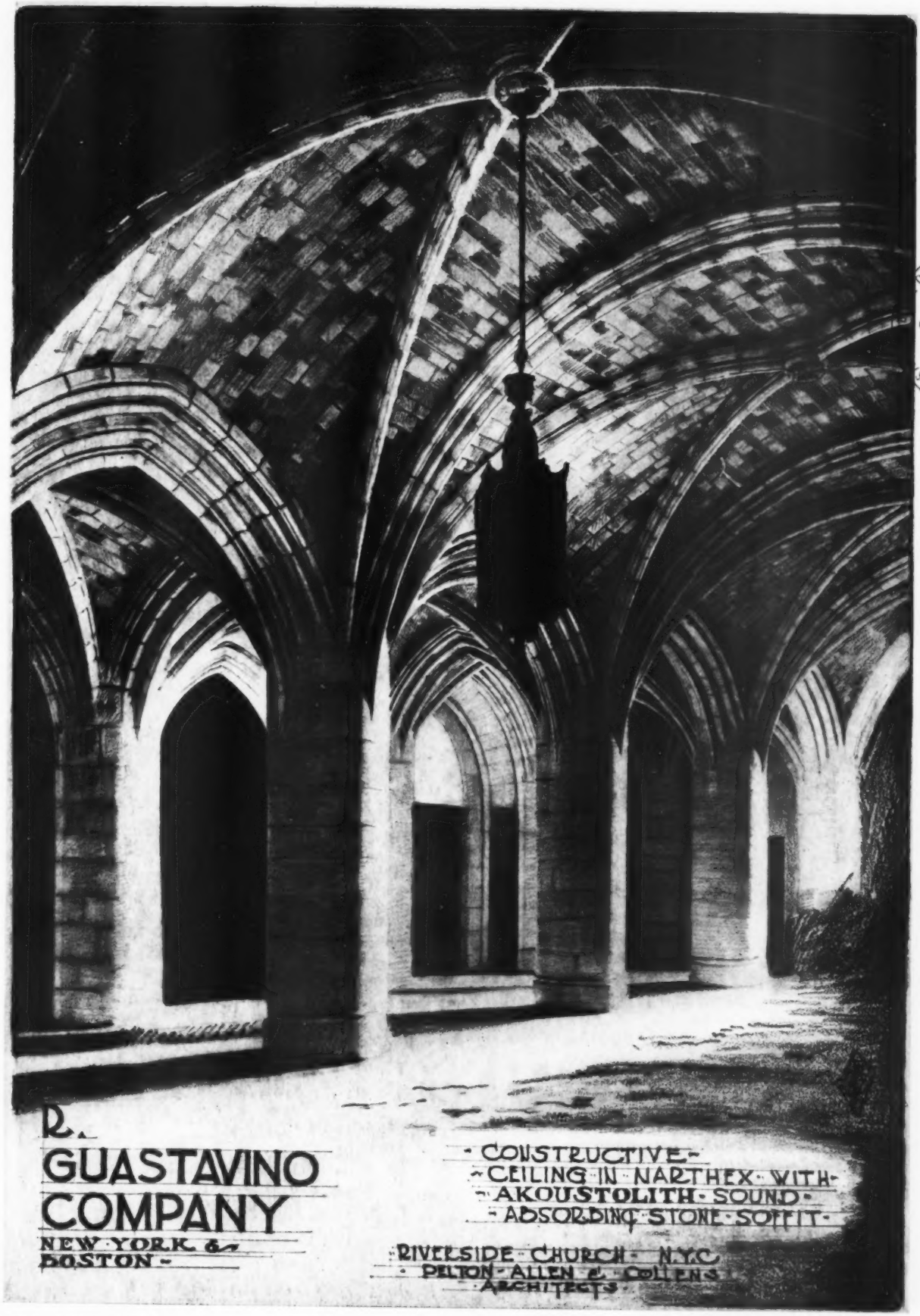

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Financing Plan Now Operating to Stimulate Building

A FINANCE plan to stimulate new building in Westchester County, New York, has been developed by Arthur W. Lawrence, president of the Westchester County Park Commission. Briefly, the plan is this: A fund of one million dollars has been made available through the Bowery Savings Bank of New York. This fund will be disbursed through three title companies operating in Westchester County, each company being allocated an equal amount. The Bowery Savings Bank purchases with this fund guaranteed first mortgages from the title companies. The title companies in turn use the money thus secured to finance only new house construction approved by what is known as the Westchester Home Finance Committee.

The Home Finance Committee is composed of Mr. Lawrence as chairman, three title company representatives, the president of the Westchester County Realty Board, the mortgage officer of the Bowery Savings Bank, and a member of the Reconstruction Finance Corporation of the New York Federal Reserve District. The committee will approve loans up to $9,000 on new houses for owner occupancy or where a builder presents evidence of the sale of the house to an owner from the plans, in approved locations, of good construction, and owned by responsible persons.

Applications for loans are referred to the committee for approval. If the committee approves the loan, the title company thereafter accepts or rejects the loan and handles the transaction in accordance with usual practice. If accepted by the title company it draws on its share of the revolving fund furnished by the Bowery Savings Bank. No bonuses will be charged for loans. Interest will be charged at six per cent.

The committee believes that the plan will aid in re-establishing confidence in real estate values by showing on the part of banks a willingness to loan; relieve unemployment in the building trades; increase the demand for building materials; and have a good psychological effect on the community.

The plan is simple and applicable to any community. A committee that will consistently investigate, carefully determine the justification for the building, and wisely judge the soundness of the investment can go far in safeguarding invested funds. Reliable assurance of the safety of capital thus used should permit the banks to resume making loans on building construction. This would soon result in stabilizing industry, creating returned confidence, and speeding the relief through private sources rather than through the slow-moving, red tape bound agencies of government. It is the basis upon which loans should have been made several years ago.

THE architects of the Kentucky Chapter, A. I. A., are the designers and chief sponsors for the Architects & Builders Exhibit, opened at 620 South Fifth Street, Louisville, Ky. There is a meeting room on the second floor in which the organizations sponsoring the exhibit will hold their meetings without charge.

Society of Liberal Arts—Joslyn Memorial, Omaha, Nebraska
John McDonald and Alan McDonald, Architects

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NEW CATALOGS . . .

Readers of AMERICAN ARCHITECT may secure without cost any or all of the manufacturers' catalogs described on this and the following page by mailing the prepaid post card printed below after writing the numbers of the catalogs wanted. Distribution of catalogs to draftsmen and students is optional with the manufacturers

ROBERTSON KEYSTONE-BEAM STEEL FLOORING

1 . . . A new type of steel flooring is described in this illustrated booklet issued by the H. H. Robertson Company, Pittsburgh. Contains load tables and other engineering data for the various types of this new floor. Explains how to finish floors and ceilings.

ILLUMINATION BY SILVRAY

2 . . . A type of lighting bulb in which a permanent silver reflector is made an integral part of the lamp is illustrated and described in this booklet issued by Silvray Lighting, Inc., New York. Gives suggestions for use in cove lighting and other types of installations.

CONSTRUCTION BULLETINS

3 . . . Various types of cabinets, breakfast nooks, built-in bookcases, etc., are described and illustrated by detail drawings in this series issued by the Douglas Fir Plywood Manufacturers Association, Seattle, Wash.

WESTINGHOUSE NOFUSE

4 . . . The De-Ion Circuit Breaker made by the Westinghouse Electric & Manufacturing Company is described in this illustrated booklet which explains the distinctive features of this new circuit breaker for various types of installations.

HOPE'S LEADWORK

5 . . . Lead rainwater heads, pipes and gutters made by Henry Hope & Sons, Inc., New York, are illustrated in this booklet. Data concerning lead as a material for this purpose are given. Pictures of actual installation are also shown.

SEEING THE U. S. S. R.

6 . . . Pictures of famous buildings, old and new, of Soviet Russia, are contained in this booklet issued by Intourist, Inc., 261 Fifth Avenue, New York. Gives facts about Soviet travel, various travel maps, and data about Russian cities such as Leningrad, Moscow, etc., together with data about buildings.

SIGNAL SYSTEMS

7 . . . Various types of electric signaling and protective systems made by the Holtzer-Cabot Electric Co., Boston, Mass., are illustrated and described in this booklet.

FOR JULY 1932

DRINKING FOUNTAIN EQUIPMENT

8 . . . Catalog S, intended as an aid to the architect in selecting drinking fountain equipment, issued by the Century Brass Works, Inc., Belleville, Ill. Illustrations are in color. A. I. A. file 29 h 1.

A NEW ERA IN DOOR CONSTRUCTION

9 . . . A veneered door with a finish applied by a new process is described and illustrated in this folder issued by the Farley & Loetscher Mfg. Co., Dubuque, Iowa. Shows the various styles of "Amilite" doors in color, construction, and various data about the new finish. A. I. A. file 19 e 12.

NEW GYRO-FLAME BOILER UNITS

10 . . . The new types of oil burners and boilers made by the Motor Wheel Corporation, Lansing, Mich., are illustrated and described in this booklet.

AMERICAN AIR FILTERS IN INDUSTRY

11 . . . "Dust engineering" or the elimination of dust is discussed in this booklet issued by the American Air Filter Company, Lousville, Ky. Discusses industrial dust problems, filtered air for industrial air conditioning and ventilation and similar subjects.

HOMES OF TODAY

12 . . . Pictures and plans of small houses and a discussion of the Sears-Roebuck & Co. plan of acting as general contractor and banker on houses built from plans drawn by outside architects are contained in this booklet.

ALGLAS SKYLIGHTS

13 . . . Standard details of "Alglas" skylights are illustrated in this folder issued by the American Barlock Co., Long Island City, N. Y.

VEOS TILE

14 . . . Pictures in color of a new vitreous enamel tile called "Veos" tile are contained in a folder issued by the Porcelain Tile Company, Warren, Ohio. Also describes this tile and explains how it may be applied by unskilled labor.

MAST ARMS AND BRACKETS

15 . . . Various types of mast arms and brackets for street lighting, etc., are illustrated in this publication of the General Electric Company, Pole Line Hardware Section, Pittsburgh, Pa.

AIR CONDITIONING FOR SMALL STORES

14 . . . General information on air conditioning for small stores and demonstrations made of this type of installation. Issued by the Carrier Corporation, Newark, N. J.

ABRASIVE TILES

15 . . . Information about abrasives, wear and tension tests, bonding strength tests, etc., are described in this folder of the Norton Company, Worcester, Mass. A. I. A. file 14-d-1.

NO POSTAGE REQUIRED ON THIS CARD

AMERICAN ARCHITECT — July, 1932
New York City

Please have the following catalogs reviewed in this issue sent to me.

Numbers .....

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• I also desire further information about the new products described in this month's "New Materials and Equipment." . . (See pages immediately following this insert)

Numbers .....

• I would like to have catalogs and information concerning the following products advertised in this issue. (Write page number or name) .....

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These NEW Catalogs may be obtained through

AMERICAN ARCHITECT

T/N One Piece Water Closet

16 . . . Various types of water closets made by W. A. Case & Son Mfg. Co. are illustrated and described in this literature. Gives roughing measurements, pictures of commercial types of water closet and illustrations of residential fixtures in color.

Curtis Floodlighting

17 . . . The complete light control required of floodlighting projectors and the size of units is explained in this booklet issued by Curtis Lighting, Inc., Chicago. Discusses concentrated, distributed, soft spot, horizontal and vertical beam light control. Gives pictures of installations.

Positive Dust Collection at Low Cost

18 . . . Framed bag dust collectors made by the Blaw-Knox Company, Pittsburgh, Pa., are illustrated and described in this booklet. Gives construction features, types of installations, and similar data.

Inco Standardized Monel Metal Kitchen Sinks

19 . . . Various types of kitchen sinks for residences, made of Monel metal, are illustrated and described in this booklet of the International Nickel Company, Inc., New York. A. I. A. file 29 h 6.

Swimming Pools

20 . . . A circular type swimming pool is illustrated and described in this booklet issued by Hunter Swimming Pools, Inc., Indianapolis, Ind.

Fire-King Automatic Coal Burner

21 . . . The automatic coal burner made by the Fire-King Stoker Co., Indianapolis, Ind., is illustrated and described in this folder, which gives dimensions, sizes and capacities, and specifications.

J & L Junior Beam Floors for Residences

22 . . . Information on the use of junior beams and concrete floors for residences is contained in this booklet issued by the Jones & Laughlin Steel Corporation, Pittsburgh. Discusses a residential floor system in which shrinkage is impossible. Tells how to construct the J & L beam floor and how to lay out a J & L junior beam first floor for a typical residence. Well illustrated. A. I. A. file 13 b.

Humidity in the Home

23 . . . A practical guide as to what humidity means in relation to health. Issued by the Holland Furnace Company, Holland, Mich.

Barre Granite

24 . . . Pictures of memorials of various types made of Barre granite and information about the material is contained in a booklet issued by the Barre Granite Association, Inc., Barre, Vt.

Shower Bath Cabinets

25 . . . Various types of Weisway shower bath cabinets and reproductions of colors in which they come are contained in a booklet isused by Henry Weis Mfg. Co., Elkhart, Ind. Gives dimensions and construction details. A. I. A. file 29 h 3.

Duriron Exhaust Fans

26 . . . The engineering and mechanical features of Duriron fans and their installation are illustrated and described in this booklet issued by the Duriron Company, Dayton, Ohio.

Fine Floors for Fine Buildings

27 . . . Various colors and patterns of rubber floors are illustrated in full colors in this folder issued by the Goodyear Tire & Rubber Co., Akron, Ohio.

Hospitals, Yesterday and Today

28 . . . One of the series of aquatint studies of prominent buildings. Accompanied by data sheet on Jenkins valves. Issued by Jenkins Bros., New York. A. I. A. file 29 b 4.

Facts About Salubra

29 . . . New colonial designs in Salubra wall covering, advantages of the material and similar data are contained in a folder issued by Frederick Black & Co., New York.

Federal Seaboard Terra Cotta

30 . . . Pictures and details of buildings in which terra cotta has been used are contained in a folder issued by the Federal Seaboard Terra Cotta Corp., New York.

Minwax Products Bulletin

31 . . . Information about waterproofing, dampproofing and the preservation of masonry and wood is contained in this booklet issued by the Minwax Company, New York. Gives details of construction for various types and contains a general discussion of this company's products.

Welded Bronze Doors

32 . . . Pictures of entrance doors and general information about the welded bronze doors made by the Ellison Bronze Co., Jamestown, N. Y. A. I. A. file 16 a.

Good Practice in Ornamental Iron Work

33 . . . More sheets of drawings of ornamental work with details. Issued by the J. G. Braun Company, New York.

Ice and Frost

34 . . . Refrigeration of industrial plants is illustrated and described in this folder issued by the Frick Company, Waynesboro, Pa.

The New Eternit Gothic

35 . . . A new asbestos cement shingle made by the Ruberoid Company, New York, is illustrated in full colors in this folder. Has rugged texture and yellow colors with heavy butts. Colors in which the shingle comes are reproduced. Information as to use on both old or new roofs.

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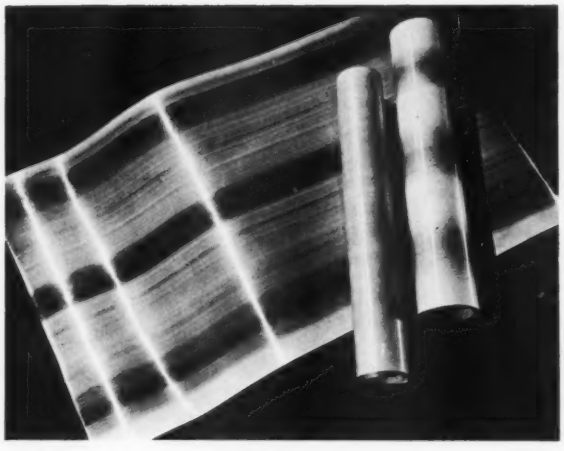
NEW MATERIALS & EQUIPMENT

BRIEF REVIEWS THAT MAKE IT EASY TO KEEP IN TOUCH WITH THE PROGRESS MADE BY PRODUCERS



Spun Glass Wallpaper

81M A wallpaper of spun glass made in Germany has been introduced into this country by Miller, Godart & Co., 138 East 55th Street, New York. The paper reflects in a soft way the illumination of a room and if indirect lighting is used unusual effects may be had. It is washable. Applied like any other wall paper except that the glue is applied on the wall and not on the paper. Rolls contain 42.16 square feet. Furnished in any color scheme.

Stainless Steel Kitchen Sink

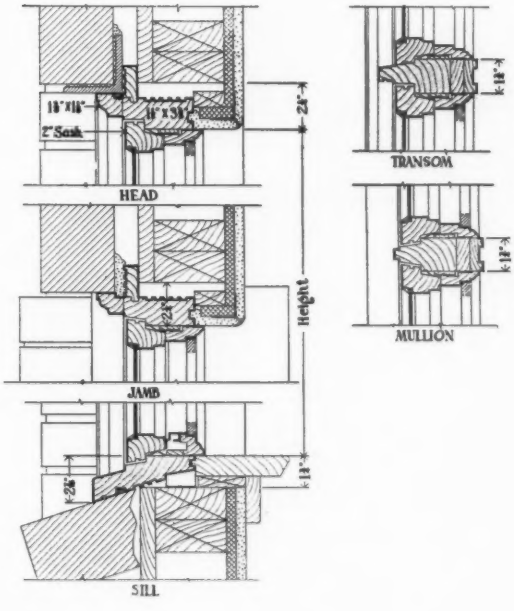
82M A seamless kitchen sink made of Enduro stainless steel and called the "Hydrocrat" has been placed on the market by the Domestic Products Division of the Bossert Corporation, Utica, N. Y. Satin finished except for polished panels in back and end splashes. The reverse side of the metal is treated with "Silentex," which is a special sound-deadening compound and prevents any metallic sound. The 8-inch basin with a removable "strainer-stopper" forms a dish pan. In back of the drainboards is a slightly raised ledge supplying a convenient space for tumbler, soap and kitchen tools. A 54-inch flexible hose, which disappears into the shelf of the Hydrocrat when not in use, makes the spray usable for rinsing and scalding dishes. Fixtures are chromium finished. Comes in four standard lengths, 4', 5', 6' and 7'. Installed on any standard cabinet installation.

Armstrong Cork Now Makes Rubber Tile

83M Rubber tile has been added to the line of floor coverings made by the Armstrong Cork Company, Lancaster, Pa. Twenty-one colors are available. The designers have paid particular attention to blending the shades employed in the different marbles. Made in 3/16" and ¼" gauges.

New Steel Flooring

84M The H. H. Robertson Co., Pittsburgh, Pa., and the Mellon Institute of Industrial Research have cooperatively developed a new steel floor slab called the "Robertson Keystone-Beam Steel Floor." The slab is fabricated by pre-forming two steel sheets and subsequently welding them together in the plane above the neutral axis. A cross-section taken through the width of a completed unit shows four keystone-shaped cells, all connected together near the neutral axis. The four ducts that constitute each unit are spaced at six-inch intervals and connect directly, when installed, with the corresponding ducts of the adjacent section of floor slab. Slabs are 24" wide and up to 12' 5" in length. They are laid across the structural beams and then bolted, clipped or welded to the supporting members thus eliminating form work.



New Anderson Complete Casement Window

85M A new type of casement window has been placed on the market by the Anderson Frame Corporation, Bayport, Minn. This window is furnished as a complete unit ready to install. It consists of winter sash with aluminum frame in addition to the regular weatherstripped sash, screen and hardware. Made of clear pine primed with aluminum paint. Wood members have greater thickness than width, which increases strength and maintains narrow lines. Sash operated without removing screen. Made in single and multiple units.

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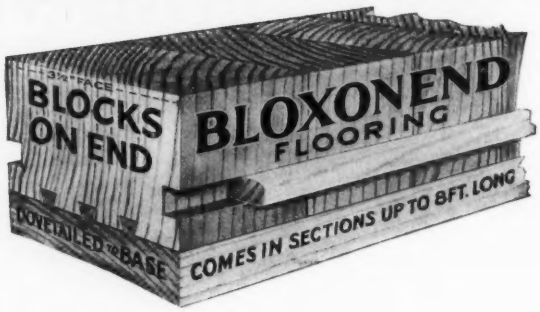

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CARTER BLOXONEND FLOORING COMPANY

GENERAL OFFICES — KANSAS CITY, MO.

Small House Designs at Cost

(*Continued from page* 35)

by refusing to handle small work and thus leave a clear field for the "jerry-builder" to reap a harvest.

A major part of new building construction is small houses which, to a large extent, reflect the cultural standards of our cities. A well-designed small home is beautiful to the eye and an inspiration for people to improve their present mode of living. If a nation-wide campaign to organize local small house service bureaus is sponsored while construction is at low ebb, we will not be forced to spend our next slack period looking at the architectural and economic failures of incompetent and unscrupulous builders.

Every architect knows that "stock plan" services are wrong in principle; that they can never become a means of providing good architecture. It is neither a feasible or practical solution of the small house problem. So-called "services" which sell plans only and architects who do not supervise their work are injuring the profession by not rendering complete service. We must impress on the public the fact that an architect does not sell plans but professional service. Plans are only "instruments of service"—a means to an end.

While few architects can contribute an adequate amount of money to support a nation-wide educational movement of the kind needed, every architect could and should devote a part of his time to the betterment of his profession. If the time spent by architects in contacting small house owners educates the public on the value of architectural service, they have been well repaid.

BULLETINS

REHABILITATING BLIGHTED AREAS. Report of the Committee on Blighted Area Housing. Published by the Architects Club of Chicago, 1801 Prairie Avenue, Chicago. Price 25 cents.

TESTS OF INTEGRAL AND SURFACE WATERPROOFING FOR CONCRETE. By C. H. Jumper. Research Paper 394 issued by the Bureau of Standards, U. S. Department of Commerce. For sale by the Superintendent of Documents, Washington, D. C. Price 10 cents.

TESTS of PLAIN AND REINFORCED CONCRETE MADE WITH HAYDITE AGGREGATES. By Frank E. Reichart and Vernon J. Jensen. A report of an investigation conducted by the Engineering Experiment Station, University of Illinois, in cooperation with the Western Brick Company, Bulletin 237 of the Engineering Experiment Station, University of Illinois. Price 45 cents.

THERMAL EXPANSION OF HEAT-RESISTING NICKEL-CHROMIUM, IRON-CHROMIUM AND NICKEL-CHROMIUM-IRON ALLOYS. By Peter Hidnert. Research Paper 388 issued by the Bureau of Standards. For sale by the Superintendent of Documents, Washington, D. C. Price 25 cents.

UNIFORM MECHANICS' LIEN ACT. Revised act prepared by a committee appointed by President Hoover and published by the Department of Commerce. Copies may be purchased from the secretary of the committee, Dan. H. Wheeler, care of the Bureau of Standards, Washington, D. C. Price 10 cents.

RESEARCH IN FARM STRUCTURES. By Henry Giese. Published by the United States Department of Agriculture. For sale by the Superintendent of Documents, Washington, D. C. Price 15 cents.

HOUSE INSULATION; ITS ECONOMICS AND APPLICATION. Published by the National Committee on Wood Insulation, U. S. Department of Commerce. For sale by the Superintendent of Documents, Washington, D. C. Price 10 cents.

COLONIAL GARDENS. The landscape architecture of George Washington's time. Prepared by the American Society of Landscape Architects and issued by the United States George Washington Bicentennial Commission, Washington, D. C. Illustrated. No price given.

ARCHITECTURE AS A CAREER. By Walter J. Greenleaf. Leaflet No. 10 of a series "Guidance Leaflets." Published by the United States Department of the Interior. For sale by the Superintendent of Documents, Washington, D. C. Price 5 cents.

ACCELERATED WEATHERING TESTS OF SOLDERED AND TINNED SHEET COPPER. By Peter R. Kosting. Research paper 422 issued by the Bureau of Standards. For sale by the Superintendent of Documents, Washington, D. C. No price given.

PERSONALS

S. WALTER KATZ, architect, has moved to 527 Fifth Avenue, New York.

KARL B. WEBER has opened his own office as registered architect and registered engineer at Perrysville Ave., at East Street, North Side, Pittsburgh, Pa., and would like to receive manufacturers' catalogs.

CHRIS J. KING, ALBERT CRIZ AND HARRY A. TURK have announced their association for the practice of architecture and interior decoration with offices at 25 East Jackson Boulevard, Chicago. They would like to receive manufacturers' catalogs and samples.

ERNEST R. RICHARDS, architect, has opened an office for the practice of architecture at 2123 Summerdale Ave., Chicago. He wishes to receive manufacturers samples and literature.

CHESTER N. LOWE AND W. NORMAN JEAVONS have opened an office at 12429 Cedar Road, Cleveland Heights, Ohio, for the practice of architecture.

MERRILL, HUMBLE AND TAYLOR is the name of a new architectural firm at 23 East 26 Street, New York. The firm is composed of Daniel D. Merrill, A. I. A., Albert Humble, A. I. A., and Walter A. Taylor, A. I. A.

FREDERICK W. MELLOR, architect, has moved to 110 East 42nd Street, New York.

CARLETON MONROE WINSLOW, architect, announces that the address of the Santa Barbara branch office has been changed to 1410 Chapala Street.

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Skill, experience and craftsmanship make such a vast difference in exterior lighting fixtures, . . . that is why Smyser-Royer Company fixtures and other metal work have been specified by America's leading architects for almost a century.

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Consult SWEET'S Volume D, Pages 5035-5045 for Exterior Lighting Fixtures — Volume A, Pages 1224-1225 for Cast Iron Veranda Designs

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Architect Can Help to Build Buildings Faster

(*Continued from page 37*)

fifty per cent can visualize easily and naturally in three dimensions from a blueprint or drawings.

E. H. Faile & Co. made use of a model on the Goelet Building, New York City. This model is said to have been of definite value beginning with its aid to the designers in perfecting the concept. The draftsmen also used this model constantly when producing the working drawings. The model aided in visualizing the project to the owner. It was of marked value, as used on the job, in aiding the subcontractors and their foremen to gain a clear idea of their own part of the work and so to be able to direct their workmen to greater advantage. Errors were forestalled and changes of detail were matured in the model instead of on the structure. Speed in production was advanced.

A SECOND factor in speeding the job, even when all means of clear visualization have been used, lies in close cooperation with the contractor and his progress schedule. The contractor needs prompt delivery of initial drawings, details and information so that he can produce the shop drawings. He then needs quick decisions and prompt return of the shop drawings by the architect. This is highly essential when drawings cover materials which must be fabricated and delivered at the time indicated by the progress schedule. I have been confidentially shown cases where delays in these features alone have been costly in both money and time.

Let us grant that the architect has performed well all of his duties thus far and construction is well under way. The architect remains in a position to be an impartial and able aid in the "strategy" of handling the job. The progress schedule is the contractor's daily Bible. Once it becomes disorganized his troubles multiply. The architect can aid by acting as chairman at weekly meetings which the contractor holds with his subcontractors on matters of schedule. Coordination of all factors and settlement of conflicting interests and a clearing up of misunderstandings is sought at these "weekly forums." The experience and suggestions of any or all members is available and mutual interest brings it into service. These forums stir the laggers to pick up their heels and also create an esprit de corps valuable for speed and smooth working.

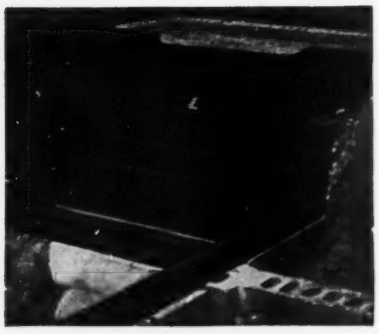
Raymond Hood spoke of the architect's likeness to Henry Ford. Well, Ford does design for speed in production. Possibly this is more an engineering principle than an architectural one. But, "pay dirt" lies in this field and it remains a case of who will stake the claim first. In the Empire State Building the repeat elements such as the 6,600 window spandrels with recesses for radiators, the stone ashlar facing and the alloy steel trim were elements that permitted fabrication in mass quantities and delivery and erection well within the time schedule. In prospect, monotony might possibly have been feared. Mr. R. H. Shreve tells me it was feared by some. But in realization, even the old timers are getting a thrill. This buildings tells a great story and enriches architecture.

The Empire State Building has added one other great contribution to speed in construction and to the economics of construction in general. For the first time, it is believed, a great change has been made in the handling of the masonry materials on the job. Since the time of the Egyptian pyramids hand handling has prevailed. Nearly one hundred thousand tons of masonry materials were handled on the Empire State Building, largely in bulk and by use of mechanical equipment and electric power much more rapidly than is customary.

About seventeen thousand tons of stone ashlar were taken from trucks by overhead tram rail hoist and then assembled upon flat cars and forwarded over industrial railroads to mine hoists and sent up inside to the distribution floors. They were then sent over other rails which placed the stone above their floors of use, thence to be lowered into place by hand winches.

Twenty odd thousand tons of backup brick were dumped into floor hoppers, fed by gravity to rocker dump mine cars and likewise forwarded over rails to the masons' side. Building tile were hand handled to flat cars and then routed on through as were the stone and brick. Mortars for setting were basement made and forwarded by the dump car method. Sixteen odd thousand tons of plastering materials were handled by dump cars for sand, and flat cars for lime and lath.

By these methods materials went up in loads ranging from one to four tons of effective net loads whereas by usual methods the loads run slightly up and down from



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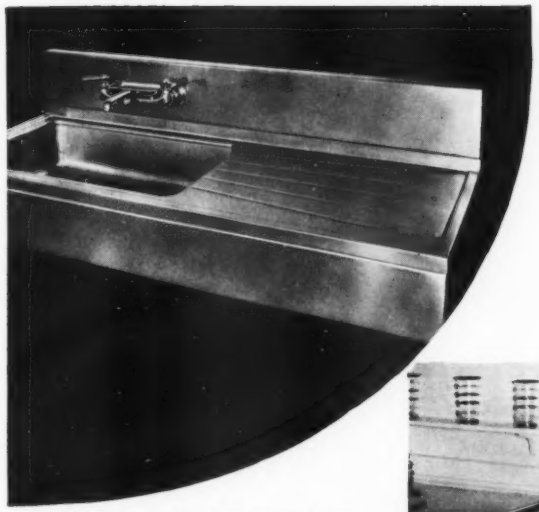

Single drain board Monel Metal "Straitline" kitchen sink. Available with drain board on either right or left side, in both 41- and 50-inch lengths.

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Monel Metal is a registered trade-mark applied to an alloy containing approximately two-thirds Nickel and one-third copper. Monel Metal is mined, smelted, refined, rolled and marketed solely by International Nickel.

● Every family wants a Monel Metal Sink...and every family can have one now. The new Monel Metal "Straitline"* Sinks are here!

Fitting companions to the higher-priced "Streamline"* models, the new Monel Metal "Straitline" Sinks are designed, styled and priced to please thousands of women who have always longed for a Monel Metal Sink but never could afford one. They offer, at truly moderate cost, the beauty and durability that have been previously associated with kitchen sinks selling at much higher prices.

In these popularly priced sinks, the new "Straitline" design and Monel Metal have been combined to give trim, modern beauty that is rare in any kitchen equipment . . . permanent beauty that grows with the years . . . and always harmonizes with every kitchen color scheme!

Such sensational sink value has been made possible only by volume production and advanced manufacturing methods. Monel Metal "Straitline" Sinks have been created to meet today's economic conditions. As a result, you can now specify Monel Metal Sinks for every home you plan..."Streamline" models for higher-priced homes and the new, inexpensive "Straitline" Sinks for the more modest ones.

Monel Metal "Straitline" Sinks are now on display at leading plumbing supply houses. See them — and if you have not received your copy of the new illustrated catalog (A.I.A. file No. 29H6) giving sizes, specification data, etc., on Monel Metal kitchen sinks, we will be glad to send it upon request.

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five hundred pounds. No accidents came from the change. The men operating the system were fully satisfied.

The handling of the workmen to their stations was noteworthy. Mine hoist passenger cages and electric hoists were so employed that "cat heads" could be raised each two-story tier of the steel and carry the workmen to their steel jobs.

These elevators also carried the concrete workers and the masonry builders to their stations and enabled them to follow closely the steel erectors. The early installation of permanent elevators, one in each bank, kept these temporary elevators open for release to the advance work. The principle of adopting modern terminal facilities and methods for transportation of materials within the building under construction has been well proved and is worth the attention and interest of the architect.

What Architects Are Talking About

(*Continued from page* 41)

Spot Are His Brain Children, and One in Fieldston, Has Won the Gold Medal of Better Homes in America."

BENJAMIN LANE SMITH of Chicago has been awarded the A. W. Brown Travelling Scholarship this year. This scholarship is awarded annually by Ludowici-Celadon Company. Second prize went to Samuel E. Homsey, Boston; third prize to William S. Morris, Albany; fourth prize to William P. Kramer, Milwaukee; and special mention to Urban A. Bowman, Abington, Pa.

WINNERS of The House Beautiful cover competition have been announced. Margaret Masson, Penacook, New Hampshire, was awarded first prize. Second prize went to Elizabeth Lewis, Victorville, Cal. Student prize went to Thula Clifton, Spokane, Wash.

CHARLES H. HIGGINS has been elected president of the New York Chapter, A. I. A., and Dwight James Baum as been elected vice president. Eric Kebbon was elected secretary, Frederick Mathesius, Jr., treasurer, and Christopher La Farge, recorder.

A COMPETITION for a town plan for the city of Stockholm has been announced. It closes February 1, 1933. Information may be secured from the registrar, Town Planning Office, Stadshuset, Stockholm, Sweden, if requested before August 15.

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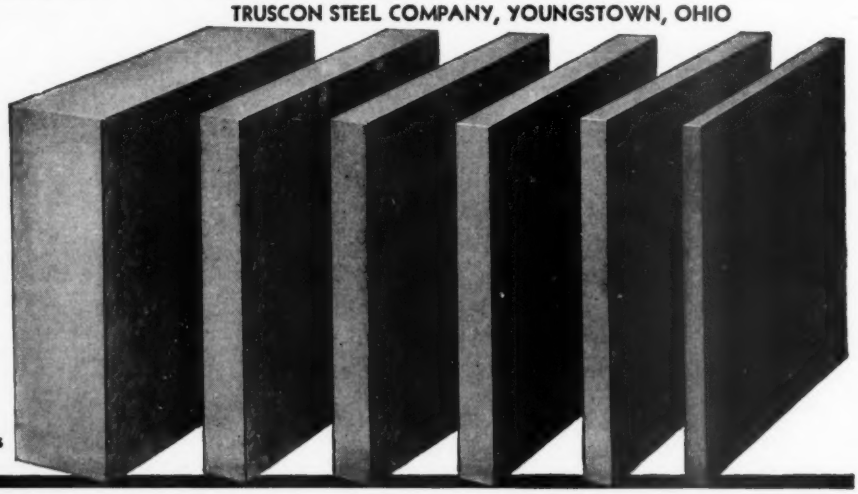

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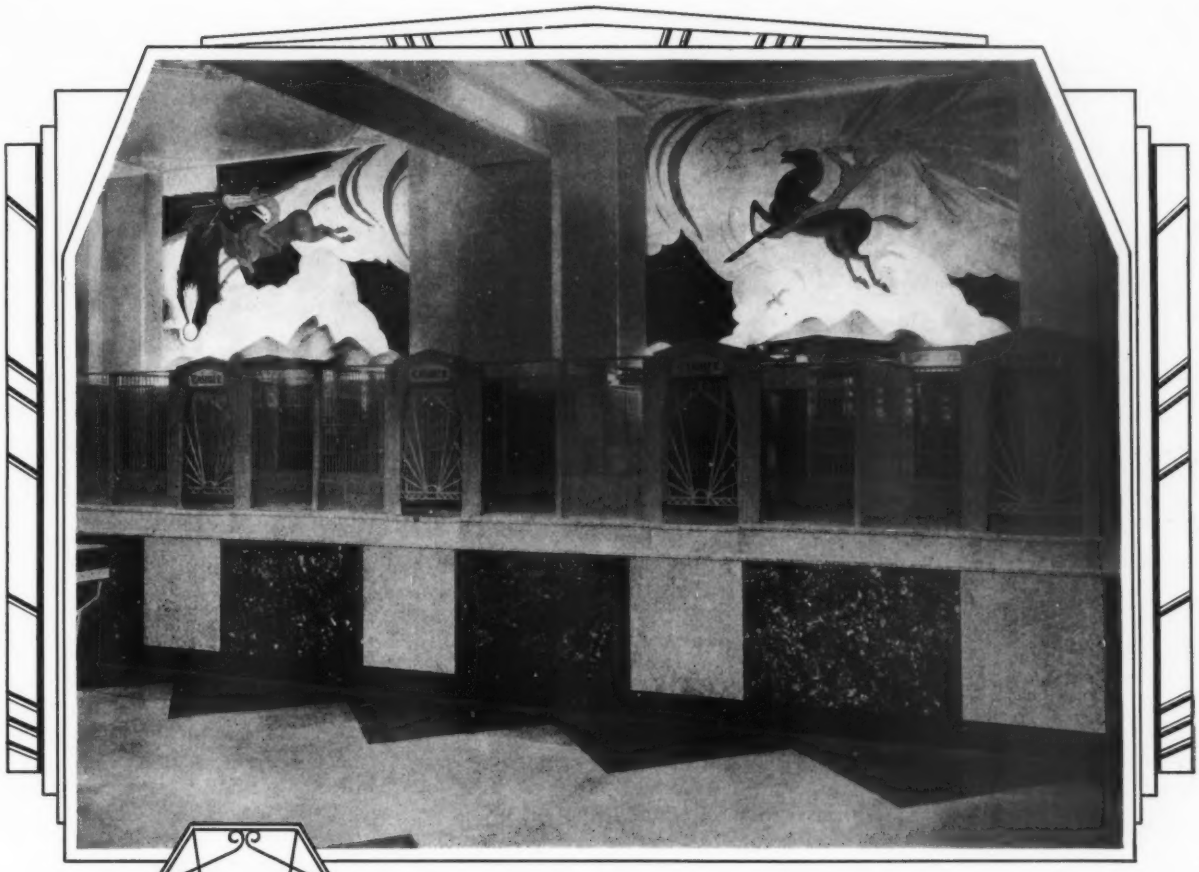

MODERNISTIC SERIES

Plate Thirteen

In this picture of the Northern States Power Building, St. Paul, Minn., the sky-riders seem to dominate the whole interior. A reproduction in actual colors would show how the various elements have been brought into harmony—a harmony which is enlivened by the spirit of the new era. It would show also how naturally the different marbles — Grand Isle Fleuri, French Gray and Montenelle—with their individual blends of color—can be adjusted to a plan of this kind. The structure was designed by Ellerbe & Company, Architects, and the marble was finished and installed by the Drake Marble Company of St. Paul.

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WHAT people in the lower income brackets want in a house, what leading architects think of the problem, and what is being done right now in the way of improved and cheaper methods of construction was discussed at a series of meetings called by the American Institute of Steel Construction and held in New York, May 24th and 25th.

E. A. YOUNG, a student of Atelier Adams-Nelson, Chicago, has been awarded the first prize for a design to illuminate the Electrical Building at the Chicago World's Fair. The contest was conducted by the Illumination Engineering Society. Foster Gunnison was chairman of the contest committee and said, "This is the first time in the history of lighting that a competition has been held in which light has been considered an integral part of architecture and not an embellishment added to a building upon its completion."

A SERIES of modernization expositions was held during the week of June 20th in the Metropolitan New York area under the auspices of the National Association of Master Plumbers. These expositions were held in some 31 cities at the same time that a national exposition was held in Madison Square Garden, New York. The object was to promote neglected maintenance or modernizing work in the plumbing and heating trades.

A NON-FEE charging employment service for technical men has been sponsored by the Engineers' Club of Philadelphia with headquarters at 1317 Spruce Street. It is known as the Philadelphia Technical Service Committee and is cooperating with the Pennsylvania State Employment Commission. A feature of the service is that assistance will be given prospective employers in preparing job specifications.

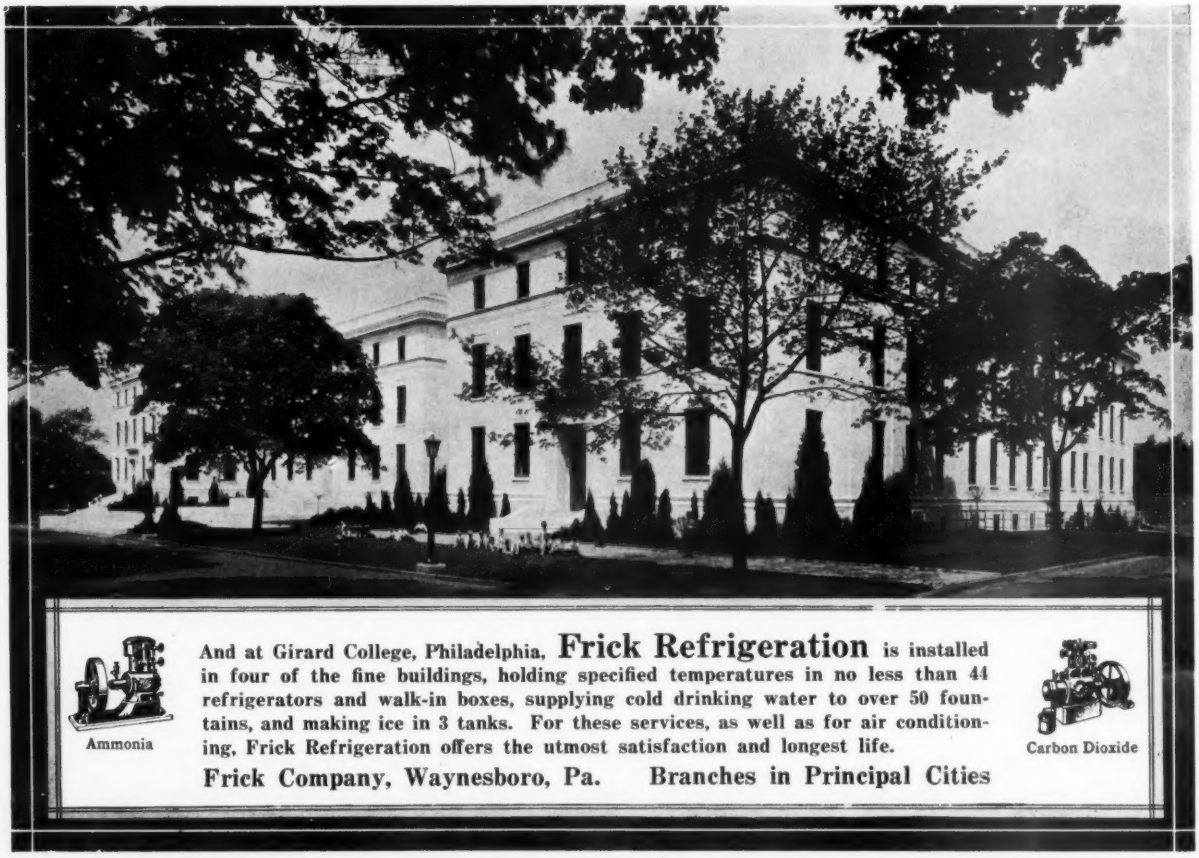
J. E. R. CARPENTER, architect, designer of the Lincoln Building and other large New York office buildings, died June 12. He was a graduate of the Massachusetts Institute of Technology.

Presenting "Space" to Prospective Tenants

(*Continued form page* 25)

content. This naturally appeals to the renting agent who knows that if he is in a position to actually get the tenant to sit down, study the layout and change the location of furniture, partitions, etc., he has created one of the essentials of a sale. He has aroused the tenants' interest through the manner of presentation of space.

However, although this method of presentation possesses a distinct advantage over the pencil sketch, it still inadequately serves to give the tenant a complete and accurate portrayal of his space. It is apparent that this method cannot create so complete and vivid a picture of the space that even the most unimaginative client will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ENDURING BEAUTY

A cozy, homelike corner of the inner patio of Scripps College, Claremont, California.
Architect
Gordon B. Kaufman

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Every construction detail plays its part in determining the permanence of any structure, and in such vital points as plumbing and heating systems, electrical installations and ventilating systems the use of Youngstown pipe, Youngstown Buckeye conduit and Youngstown Steel Sheets is sound assurance of the enduring utility of these important details.

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have a clear and definite picture of it. To create such a picture, the model method of presentation may be utilized.

This method has the advantage of showing the problem in three dimensions, length, breadth, and depth. The construction of a model for this particular purpose is simple. An outline of the typical unsub-divided floor plan of the tenant's space is transposed upon a wooden base. The model, of wood, is then built to scale. The exterior walls, utilities, etc., are glued down by means of "areo glue." This glue has the faculty of drying immediately, yet holding the parts securely in place. Once the columns are built, the sub-dividing walls and other construction items are put in place.

Furniture models are usually made up in advance and kept in stock. A steel pin is secured to the underside of the furniture so that it can be shifted around and maneuvered to any position desired. The windows are indicated by using celluloid. The model method, more than any other, accomplishes the purpose of quickly visualizing rentable space to tenants or prospective tenants.

The Readers Have a Word to Say

(Continued from page 79)

placing a false chimney wherever they felt a real chimney might be useful to fill out the composition. Live and learn.

At least you lead the country in publishing the plans along with the photographs of the chimney exteriors.—*Robert Tappan, Architect, New York.*

• WORLD'S LARGEST ROOF

Editor, AMERICAN ARCHITECT:

MAY I call your attention to the following misstatement in the May, 1932, AMERICAN ARCHITECT? On page 29, under the picture of the Travel and Transport Building, which is given as 200 feet across, it states. . . . "This is the largest unobstructed area ever enclosed beneath a roof."—In Breslau, Germany, there is a market hall covered with a dome of 213′ span, and in Leipzig, Germany, there is one of 246′ span.—*Harry Bogner, Architect, Milwaukee, Wis.*

• IF "ARCHITECT" WILL WRITE

A COPY of a letter addressed to Bruce Barton relative to an article he wrote for the "Woman's Home Companion" was forwarded to the editors of AMERICAN ARCHITECT. The letter was signed by the nom de plume "Architect." A post card from "Architect" has been received calling attention to the fact that no mention was made in the June issue of AMERICAN ARCHITECT of the letter. While the letter was received too late for mention in the June issue, attention is called to the fact that no unsigned communications can be published. Names will be withheld if desired but the original communication must contain the name and address of the sender.

How to Make a Living Out of Architecture

(*Continued from page 29*)

I learned to do the best I have the least opportunity to do—ordinary business grind takes all my time. Art—my hat! I only wish it were!"

"Oh! I say now!" protested F. Puddingstone Huntley, solemnly. "You fellows can't truthfully say that architecture is not an art, even if we devote only a small portion of our time to its artistic side. You will have to admit that it is this significant ten per cent which differentiates it from the ordinary business."

"Omigosh!" Jackson Lee threw up his hands despairingly. "I'm not fool enough to advocate removing the artistic appendix of the goddess of architecture—the old girl needs it; without it, the dear old thing might shrivel up and have to have her face lifted. However, we are judged by our business ability as much as by our artistic accomplishment. The fact that we are inadequately trained in the business side of architecture is responsible for many of the difficulties that confront us today, and we can't laugh that off, either—we've got to face facts and find the answer. Our training is out of balance; our education is, say, 85% artistic for work which is 85% business. After all, we are largely judged by our business accomplishment."

"Right you are, Jack, old boy!" impulsively declared George Bradley. "I think it's high time we architects quit worshiping at the shrine of the old gods of tradi-

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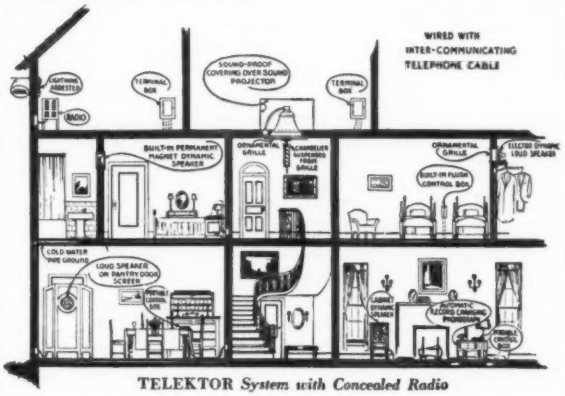

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A distinctive stone and stucco bungalow from July Good Housekeeping. Lewis E. Welsh, architect

Wise Spending Needs the Architect

To safeguard its readers' pocketbooks Good Housekeeping guarantees the products which use its advertising pages. For the same reason Good Housekeeping pleads editorially the services of the architect when it comes to that most important of investments—the building of a home.

Month after month, the architectural pages (a major editorial feature) drive home to the 1,850,000 families Good Housekeeping reaches, the gospel of the value and economy of the architect's services. It urges this to insure the wise expenditure of the building funds, to guard against the costly mistakes the tyro inevitably makes, and to guarantee a finished house satisfactory in all details. Thus, while stimulating the desire of potential home builders, Good Housekeeping shows the safest means of gratifying it—through the use of the architect.

It is a reasonable surmise that many of the small house architect's best prospects will be found among these Good Housekeeping families—not only because of this carefully cultivated predisposition toward the architect, but also because of financial ability to build the homes that will embody all their ideals.

GOOD HOUSEKEEPING

Everywoman's Magazine

tion and started being our own ancestors.

"Well, why not?" agreed Julian Munroe. "Other businesses, when they have been suffering loss and chaos because of ignorance of operating costs, have resolutely organized to establish more accurate and standardized accounting methods. They have made analytical studies of their businesses which have resulted in a measure of stabilization and prosperity. It's the same with us—a matter of perish or progress!"

James Cameron absent-mindedly sketched on the table cloth with a soft pencil as he spoke: "You know, fellows, I believe that the architectural organizations which realize this necessity and help the profession to see economic daylight will be the only ones to grow and flourish."

"I think you're right, Jim. I'm awfully sorry, old man," Jackson Lee apologized regretfully. "The whistle blows; time to take up the pick again; one-thirty, you know. It seems to me we can well devote another session to a discussion of the business side of architecture, so be on hand with padded gloves for the next bout. We'll see how far we get next time before the gong rings."

A Plan to Reorganize the Small House Bureau

(*Continued from page 21*)

lump-sum prices. This is one of the greatest and too long unrecognized advantages held by the "jerry-builder." A man scrimps through half his life to save $7,000 to build a home. An architect goes to him and says, "I'll draw you some plans for $400 of your savings. That will leave $6,600 for the house. I can't promise that it won't cost as much as $7,000 when bids are received. If so, and you find you can't afford to go through with it, you must pay me $245 anyway." Another man comes along and says, "Here are a number of beautiful homes for exactly $7,000. The price includes everything. Take your choice." He does.

To complete our organization we must provide a fair and simple credit plan, with easy terms and reasonable security. Properly presented, we might obtain the assistance of the Federal Government.

Investigation of an average community of 10,000 inhabitants disclosed the astonishing fact that a building and loan association, partially controlled by a lumber company, has spent over $2,000,000 on 500 homes within the course of a few years almost entirely without the services of architects! Such is the lure of the unit price, the credit system and stock plans.

With the aid of Federal, State and local governments, patriotic and civic societies, let's throw behind our activities the weight of a powerful, nation-wide advertising campaign to encourage and perpetuate the home building movement. I dare say that such a campaign, coupled with the good accomplished, would be a predominating factor in our efforts to "educate the public."

We hold a key to national, economic recovery, professional rejuvenation and immediate aid to our own unemployment problem all rolled into one. So let's throw out petty arguments, roll up our sleeves and get at this thing. It's a big job, an opportunity to prove our possession of the leadership we so vigorously claim as an attribute of the architect—too rarely exhibited to a doubting public.

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Desco METAL
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Empire State
Architects:
Shreve, Lamb and Harmon

Between Architect and Owner no question of cost of Cheney Flashing arises if first is discussed the future expense of constantly repairing damages caused by Wall Seepage and Leaks.

The installation of Cheney Flashing in the world's largest Terminal, Inland Terminal No. 1, Port of New York Authority, is ample evidence that the Owners as well as the Architects considered Cheney Flashing an integral part of their plans.

Inland Terminal No. 1
Port of New York Authority
Architects:
Abbott, Merkt & Company

Owners today, keen to reduce Building Maintenance are easily convinced of the true value of Cheney Thru-Wall Flashing and the necessity of installing it to prevent the destructive results of water penetration.

Whether you are now planning another Empire State, a factory, warehouse, school, church or simple structure—"you can't afford not to thru-flash" the masonry walls, and Cheney Flashing is the only permanent protection against future regrets. Descriptive catalog on request.

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Architects.
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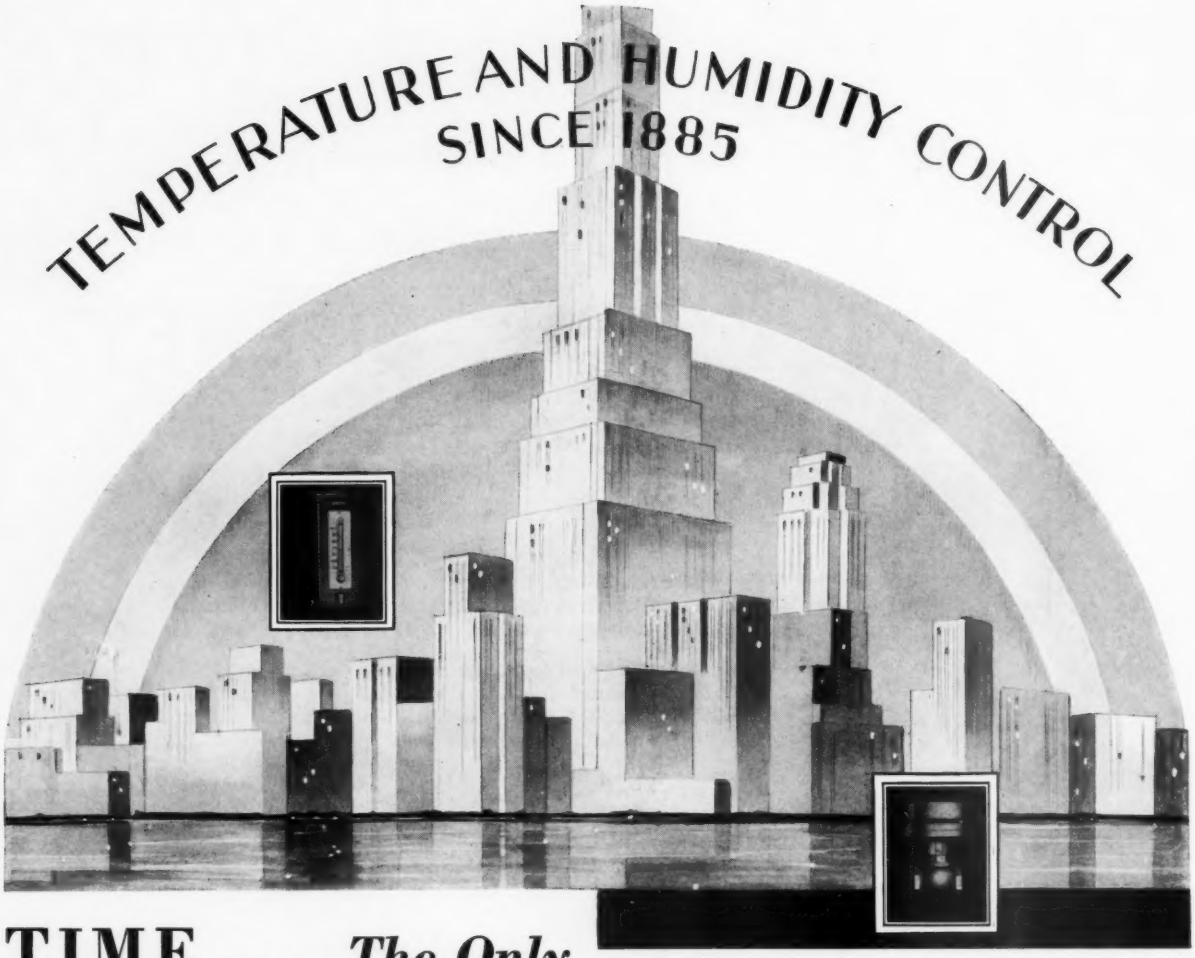

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NEW YORK STATE NATIONAL BANK . . Albany, New York . . . This building, heated by steam generated by cast iron oil fired boilers, is equipped with Johnson Heat & Humidity Control. The installation consists of 250 Johnson Dual or 2 temperature Thermostats, 11 Johnson Model Thermostats and 630 Sylphon Radiator Valves . . with wall boxes for future thermostats as required for office additions, extensions, alterations, etc. A Johnson Control Board is in the office of the chief engineer, which is operated to set the thermostats in the building for normal temperature during the day and lower temperature for the night; and in the morning back to normal temperature again . . Henry Ives Cobb, Architect, New York City.

JOHNSON SERVICE COMPANY, Milwaukee, Wis.

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